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Thank you for purchasing a HUMAX personal video recorder. Please read this user manual carefully to be able to safely install, use and maintain the receiver at maximum performance. Keep this user manual next to your receiver for future reference.

Notice

Read this manual carefully and make sure you understand the provided instructions. For your safety, check what the result each action will be.

Warnings, Cautions and Notes

Throughout the whole manual, pay special attention to the following marks that indicate hazardous situations.

- **Warning**

  Indicates a hazardous situation which, if not avoided, could result in serious injury.

- **Caution**

  Indicates a situation which, if not avoided, could damage the equipment or other apparatus.

- **Note**

  Indicates additional information to the user to make the user aware of possible problems and information of any importance to help the user to understand, to use and to maintain the installation.

To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

This symbol indicates **dangerous voltage** inside the product that presents a risk of electric shock or personal injury.

This symbol indicates important instructions accompanying the product.

Safety and Warning

This personal video recorder has been manufactured to comply with international safety standards. Please read the following safety precautions carefully.

Safety Instructions and Precautions

1. **MAINS SUPPLY**

   90 - 250V AC 50/60Hz.
   Operate your product only from the type of power supply indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company. Disconnect the receiver from the mains before you start any maintenance or installation procedures.

2. **OVERLOADING**

   Do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.

3. **LIQUIDS**

   The receiver should not be exposed to any liquids such as dripping or splashing. In addition, no objects filled with liquids, such as vase, should be placed on the apparatus.

4. **CLEANING**

   Disconnect the receiver from the wall outlet before cleaning. Use a light damp cloth (no solvents) to dust the receiver.

5. **VENTILATION**

   The slots on top of the receiver must be left uncovered to allow proper airflow to the unit. Do not stand the receiver on soft furnishings or carpets. Do not stack electronic equipment on top of the receiver.

6. **ATTACHMENTS**

   Do not use any unsupported attachments as these may be hazardous or cause damage the receiver.

7. **CONNECTION TO THE SATELLITE DISH LNB**

   Disconnect the receiver from the mains before connecting or disconnecting the cable from the satellite dish. Failure to do so can damage the LNB.

8. **CONNECTION TO THE TV**

   Disconnect the receiver from the mains before connecting or disconnecting the cable from the satellite dish. Failure to do so can damage the TV.

9. **EARTHING**

   The LNB cable must be buried in the ground. The buried cable of the system must comply with SABS 061.

10. **LOCATION**

    Place the receiver indoors to avoid exposing it to lightning, rain or sun.
    Do not place it near a radiator or heat register.
    Make sure it has more than 10 cm clearance from any appliances susceptible to electromagnetic influences, such as a TV or a VCR.
    Do not block these openings with any object, and do not place the product on a bed, sofa, rug, or other similar surface.
    If you place the product on a rack or bookcase, ensure that there is adequate ventilation and that you have followed the manufacturer's instructions for mounting.
    Do not place the product on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling product can cause serious injury to a child or adult, and serious damage to the appliance.

11. LIGHTNING, STORM, or NOT IN USE

Unplug the product from the wall outlet and disconnect the antenna during a thunderstorm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-surges.

12. EXTRANEOUS OBJECTS

Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts.

13. REPLACEMENT of PARTS

When the replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.

Warning

1. Follow these directions in order not to damage the power cord or plug.
   Do not modify or process the power cord or plug arbitrarily.
   Do not bend or twist the power cord too much.
   Make sure to disconnect the power cord with the plug held.
   Keep heating appliances as far as possible from the power cord in order to prevent the cover vinyl from melting.
2. Follow these directions. Failure to follow one of them may cause electrical shock.
   Do not open the main body.
   Do not insert metals or inflammable objects inside the product.
   Do not touch the power plug with wet hands.
   Disconnect the power cord in case of lightning.
3. Do not use the product when it is out of order. If you continue to use the product when defective, a serious damage can be caused toit. Make sure to contact your local product distributor if the product is out of order.
4. Please do not insert metal or alien substance into the slots for the modules and smart cards. In doing so can cause damage to the STB and reduce its life span.
5. Hard Disk Drive
   Do not move the product or turn the power off suddenly while the hard disk drive is running.
   The company shall not be liable for any corruption of data on the hard disk drive caused by the carelessness or misuse of users.
   Do not separate the hard disk drive from the main body.

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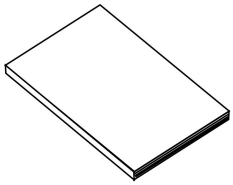
1. Before Using the Receiver

This chapter provides detailed instructions on the product and its accessories.

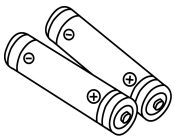
1.1 Package Contents

Please check all package contents before using your receiver.

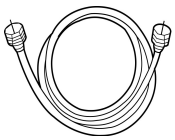
Remote Control Unit (1)



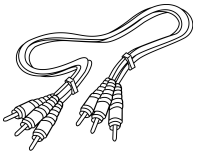
User's Manual (1)



Batteries (2)



RF Cable (1)



RCA A/V Cable (1)

Note: Package Contents can be changeable according to the area.

Note:

- Since faults may occur if the remote controller is being left without a battery for a long time, always keep the battery inserted in the remote controller.

Warning: To install a hard disk drive, contact your product provider.

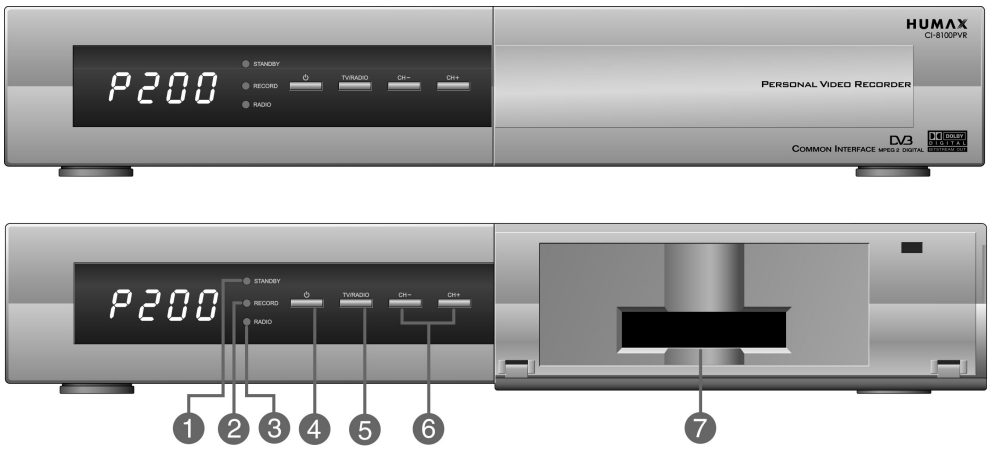
The company shall not be liable for problems caused by installing a hard disk drive by user.

This product provides best performance with Seagate ST340020ACE (40GB), ST360020ACE (60GB),or ST380020ACE (80GB) hard disk drive.

This product provides up to 80GB of hard disk drive. The company shall not be liable for problems caused by the installation of hard discs bigger than 80GB.

1. Before Using the Receiver

1.2 Front Panel



1. **STANDBY LED**

   Red light is displayed when the product is in the standby mode.

2. **Record LED**

   Green light is displayed when the product is in recording.

3. **RADIO LED**

   Yellow light is displayed when the receiver is in radio mode.

4. **STANDBY Button** (⏻)

   Switches between operation and standby modes.

5. **TV/RADIO Button**

   Switches between TV and Radio.

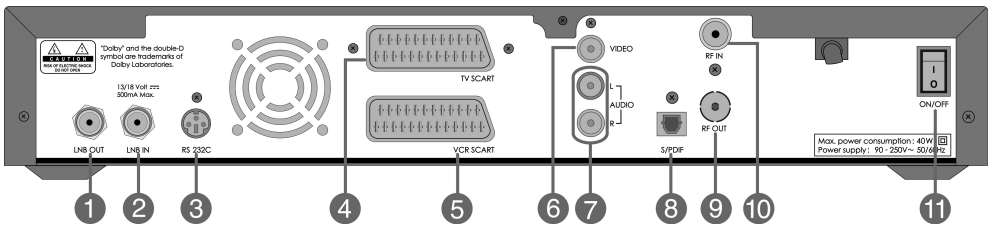
6. **CH - / CH +**

   Moves the TV/Radio channel up/down.

7. **CAM SLOT**

   For a two CA Module with a smart card.

1.3 Rear Panel



1. **LNB OUT**

   Connect other digital satellite receiver.

2. **LNB IN**

   Connects a satellite antenna cable.

3. **RS-232C**

   Connects to your PC to upgrade product's software programme.

4. **TV SCART**

   Connects a TV SCART cable.

5. **VCR SCART**

   Connects a VCR SCART cable.

6. **VIDEO**

   Connects to your TV or VCR and output Video signals.

7. **AUDIO L/R**

   Connects to your TV or VCR and output Audio signals.

8. **S/PDIF**

   Outputs the digital audio signals (S/PDIF).

9. **RF OUT**

   Connect a RF signal from the product to RF input jack on your TV.

10. **RF IN**

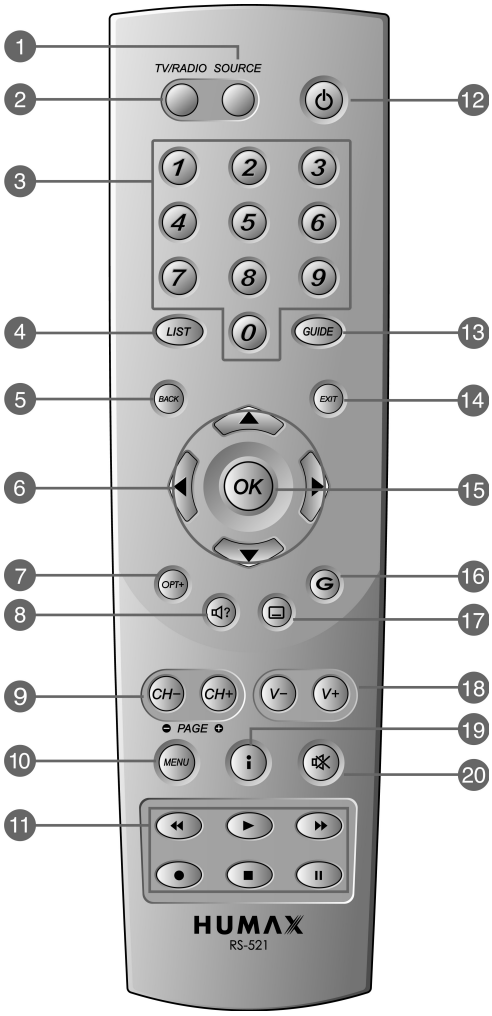
    Connect a general aerial antenna with the cable jacks to the RF input jack on the product.

11. **ON/OFF**

    Power on/off.

1. Before Using the Receiver

1.4 Remote Control Unit



1. SOURCE
2. TV/RADIO
3. NUMERICAL BUTTONS
4. LIST
5. BACK
6. ARROW BUTTONS
7. OPT+ (OPTION)
8. SOUNDTRACK
9. CH-/CH+ and PAGE-/PAGE+
10. MENU
11. PLAYBACK CONTROL BUTTONS
12. STANDBY
13. GUIDE
14. EXIT
15. OK
16. G (Game)
17. SUBTITLE
18. V-/V+
19. i (INFORMATION)
20. MUTE

1. **SOURCE**

   Selects the input source between TV and satellite receiver.

2. **TV/RADIO**

   Switches between TV and Radio modes.

3. **NUMERICAL (0~9) BUTTONS**

   Enters a TV/Radio channel number or menu option number.

4. **LIST**

   Displays the channel list.

5. **BACK**

   Returns to the previous menu and screen.

6. **ARROW BUTTONS**

   Changes the channel or move the cursor to the up, down, left or right menu option.

7. **OPT+ (OPTION)**

   Displays the channel attributes during watching a programme.

8. **SOUNDTRACK**

   Displays the Soundtrack.

9. **CH-/CH+ and PAGE-/PAGE+**

   Changes the Channel or Page.

10. **MENU**

    Displays the main menu.

11. **PLAYBACK CONTROL BUTTONS**

    Includes fast rewind, play, fast forward, record, stop, pause buttons.

12. **STANDBY**

    Switches between Operation and Standby modes.

13. **GUIDE**

    Displays the Programme Guide.

14. **EXIT**

    Exits the main menu or Guide screen.

15. **OK**

    Selects a menu, or confirms the selected operation. And displays the channel list during watching a programme.

16. **G (Game)**

    Displays the Game.

17. **SUBTITLE**

    Changes the subtitle language.

18. **V-/V+**

    Adjusts the audio volume.

19. **i (INFORMATION)**

    Displays the information about the channel and programme.

20. **MUTE**

    Pauses the audio temporarily. That is, volumes on/off temporarily.

2. Setup

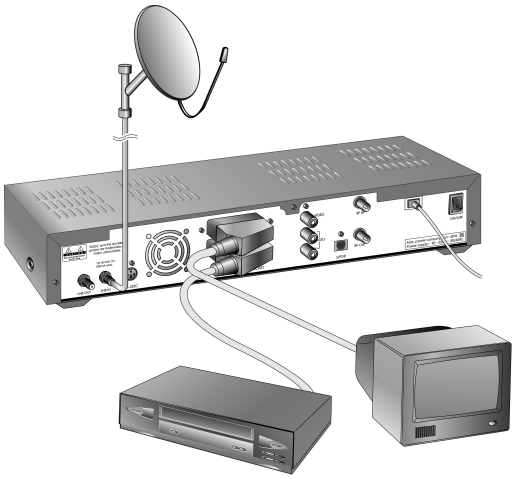
This chapter describes how to set up the receiver. Select the most appropriate procedure depending on your requirements.

Note: If you encounter any problem when setting up the receiver, please contact your local product distributor.

2.1 Connecting the Antenna

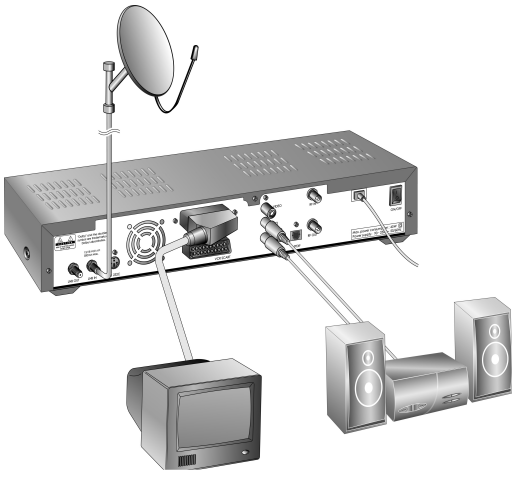
1. Connecting TV and VCR

This is the most simple setup mode.



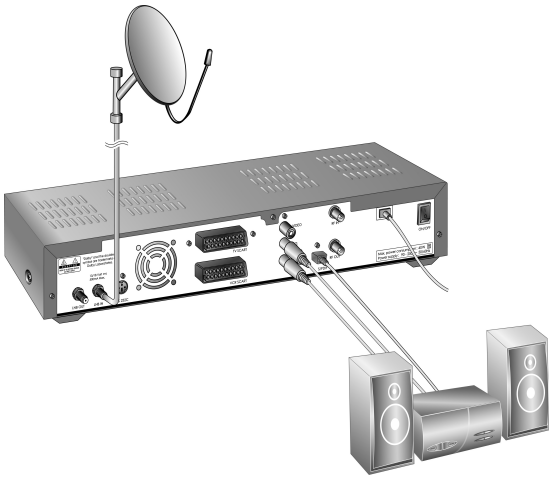
2. Connecting Hi-Fi system 1

Connect the outputs on this receiver to corresponding inputs on your Hi-Fi system. (left audio out to left audio in, right audio out to right audio in)



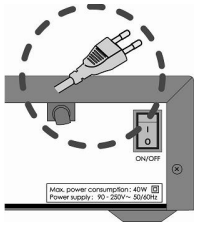
3. Connecting Hi-Fi system 2

If you wish to connect S/PDIFthe optical S/PDIF terminal and Dolby digital decoder to listen digital audio, connect as following.



2.2 Powering On

1. Connect the power cord of the receiver to a wall outlet.



2. Turn on the power button, located at the left on the back of the receiver.
   Make sure that the Standby LED indicator is turned on Red.

3. Power on by pressing the **STANDBY** ( ) button at Remote Controller or the **STANDBY** ( ) button at the front of the receiver.

3. Installation Wizard

When powering on your receiver for the first time after purchasing, the Installation Wizard is automatically started.

You can easily set-up using simple organisation and options, and watch the broadcasting after completing the set-up procedure. You can select items using the **NUMERICAL** (0~9) buttons.

Note: If you press the **BACK** (BACK) button or select ***Back*** and press the **OK** (OK) button while running the ***Installation Wizard,*** you can return to the previous screen.

3.1 Language

You can select Menu, Audio, and the subtitled language.

Select the appropriate language from the list using the ▲/▼ button and press the **OK** (OK) button to save the selected language as a default language and move to the next step ***Antenna Setting*** .

3.2 Area Setting

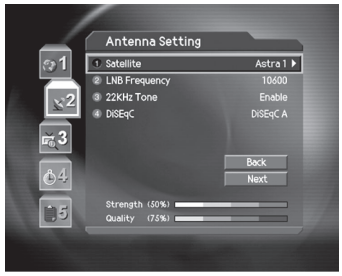
You can select area.

Select the appropriate area from the list using the ▲/▼ button and press the **OK** (OK) button.

3.3 Antenna Setting

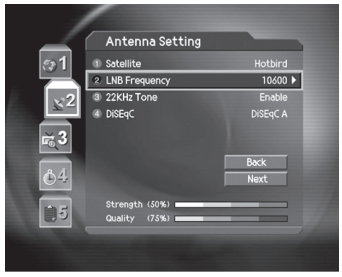
You can set the antenna's properties to watch the programme.

1. Select the ***Satellite*** which the antenna points to. Press the **OK** (OK) or ▶ button to display ***Satellites List.*** Select Satellite using the ▲/▼ button, and press the **OK** (OK) button.



2. Set the ***LNB Frequency*** value

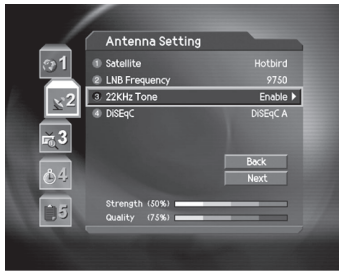
   Press the **OK** (OK) or ▶ button to display ***LNB Frequency List.*** Select ***LNB Frequency*** using the ▲/▼ button, and press the **OK** (OK) button.
   If you cannot find the LNB Frequency value from the list, select ***User Define,*** manually enter the frequency using the **NUMERICAL** (0~9) button, and then press the **OK** (OK) button.



Note: When using Universal LNB, select ***Universal*** for LNB Frequency which is 9750/10600 (MHz). Also, if you select ***Universal,*** 22KHz tone value is disabled.

3. Set up ***22kHz Tone.***

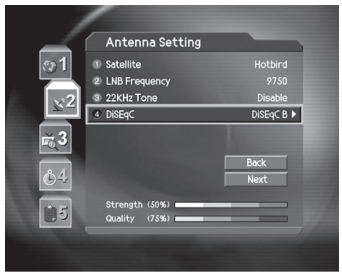
   Select ***22kHz Tone*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button to change the setting. When using 22kHz tone switch, select ***Enable.*** Otherwise, select ***Disable.***



4. Select ***DiSEqC*** switch.

   Select ***DiSEqC*** item using the ▲/▼ button, and press the **OK** (OK) or ▶ button to display DiSEqC Switch List.
   Select ***DiSEqC*** Switch using the ▲/▼ button and then press the **OK** (OK) button.

5. When you complete the setting, select ***Next*** using the ▲/▼ button and press the **OK** (OK) button to start Automatic Search.



Note:

- If the antenna is correctly set up, the level at signal strength bar and quality bar, which are located at the bottom of the screen, are generally moved up.
- If you encounter any problems or questions when setting up the antenna, please contact your local product installer or distributor.

3.4 Automatic Search

You can automatically search for satellites according to the Antenna Setting.

Please wait for finishing the Automatic Search. If you want to stop the Automatic Search, select the **OK** (OK) button.

If the Automatic Search is stopped or finished, the selected result is automatically saved and go to the next step.

3.5 Time Setting

You can set the current time.

Press the **OK** (OK) or ▶ button to display the values for ***GMT Offset.*** Select the appropriate GMT Offset value using the ▲/▼ button and press the **OK** (OK) button to set the current time. Check the current time at the bottom of the screen to see if it's correctly set up. Then select ***Next*** using the ▲/▼ button and press the **OK** (OK) button to finish Installation Wizard.

Warning: Press the **EXIT** (EXIT) button to save the previous input information and exit the Installation Wizard when running the Installation wizard. If you exit the Install Wizard without fully completing the setting procedures, you may not watch any broadcasting normally. In this case, you can use the ***Menu-Installation-Antenna Setting*** and ***Menu-Installation-Automatic Search*** menu to configure your receiver as you like.

4. Basic Operation

This chapter describes functions such as switching channel, volume control, and basic features for watching programmes.

4.1 Switching Channel

You can switch the current channel using one of the following methods.

1. Press the **CH-/CH+** (CH-/CH+) button.
2. Enter your desired channel numeric using the **NUMERICAL** (0~9) buttons to move to the channel directly.
3. Press the **TV/RADIO** ( ) button to switch between TV channel and Radio channel.

Note: You can switch channel using Programme Guide or Channel List. Please refer to Chapter 5 and 6 for more information.

4.2 Volume Control

1. Press the **V-/V+** (V-/V+) buttons to adjust the audio volume.
2. Press the **MUTE** ( ) button to stop the sound temporarily.

Note: The mute function keeps enabled while you change the channel.

4.3 Change the Subtitle Language

If the current programme provides Subtitle information, you can select the language for the Subtitle.

1. Press the **SUBTITLE** ( ) button to display the subtitle language list.
2. Select your desired subtitle language using the ▲/▼ button, and press the **OK** ( ) button. Then the subtitle will be displayed in the selected language at the bottom of the screen.
3. Select ***OFF*** from the subtitle language list not to display subtitle from the screen.

Note: You can select a default subtitle language by selecting ***MENU - Preferences - Language Setting - Subtitle Language.***

4. Basic Operation

4.4 Change a Audio Language

If the current programme is available in multiple audio languages, you can select the language that you wish to listen in.

1. Press the **SOUNDTRACK** ( ) button to display ***soundtrack list.***
2. Select your desired audio language using the ▲/▼ button to change Audio immediately.
3. Select Audio Direction (left, right, stereo) using the ◀/▶ button.

Note:

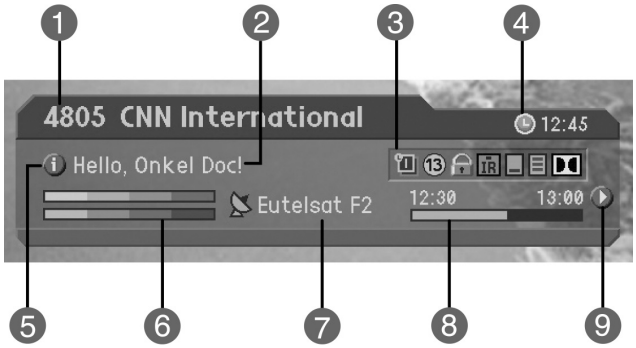
- You can select your desired default audio language by selecting ***MENU - Preferences - Language Setting - Audio Language.***
- If the programme is Dolby digital one, you cannot set the audio direction such as left, right, and stereo.
- If you select ***Dolby*** by selecting ***MENU - Preferences - Language Setting - Audio Priority,*** Dolby Digital programme is automatically broadcasted with Dolby digital audio without considering Default audio language.

4.5 Programme Information (i-plate)

Programme information is always displayed for a specific period of time whenever you switch channels. You can view the programme information by pressing the **i** ( ) button while watching a programme. Press the **EXIT** ( ) button to hide the I-plate.

1. General Information

The General Information is displayed as following on the screen.



1. Channel number and channel name
2. Programme name
3. Icons

   REC Displayed only if this programme is recording.

   Displayed only if this programme is reserved.

   (13) Represents parental level. It indicates the minimum level of ages that the programme is targeted at.

   Displayed only when the channel is a locked channel.

   Displayed only when the channel is a scrambled channel.

   Displayed only when subtitle information is available.

   Displayed only when there is any teletext information.

   Displayed only when the programme is a dolby digital one.

4. Current time
5. Detail programme information: displayed if detailed programme information is provided.
6. Signal strength and signal quality : indicates signal level.
7. Satellite name or channel change mode : If you select ***All channels*** by selecting ***MENU - Edit channels - Channel Change Mode*** the Satellite name, which the current channel is belonged to, is displayed; if you select ***Within the current channel list,*** the channel list, which user selected, is displayed.
8. Programme broadcasting time and progress bar: displays programme playing time and progress bar.
9. Next programme Information : displayed if next programme information is provided. Press the ▶ button to display the next programme information.

Note: If there is no available programme information, programme information is not displayed.

2. Detail Programme Information

You can see detailed information about the current programme. Press the **i** (ⓘ) button where I-plate is displayed to view detailed information.

Note:

- Press the **i** (ⓘ) button again to hide the information box.
- If the Detail information is more than one page, use ▲/▼ button to move to the previous or next page.

4.6 Option List

You can view and confirm detailed information about the current channel and change the information in necessary.

Note: Press the **OPT+** (OPT+) button when the channel list is displayed to view ***Option List.*** Then the following functions in the option list are performed to the current channel where cursor is located.

1. Add a channel to favourite group

You can add current channel to the favourite group immediately. Also, you can add a channel to multiple Favourite groups.

1. Press the **OPT+** (OPT+) button.
2. Select ***Favourite*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Favourite Group*** using the ▲/▼ button and press the **OK** (OK) button to register for Favourite Group

4. Press the **OK** (OK) button again on the selected ***Favourite Group*** to release the registered channel.
5. Move to the parent menu using the ◀ button to save the changes automatically.

Note: For detailed information about how to change Favourite Group's name and how to register Favourite Channel for the whole channels, refer to ***Chapter 5.***

2. Lock/Unlock a Channel

You can lock or unlock the current channel while watching a programme.

1. Press the **OPT+** (OPT+) button.
2. Select ***Lock*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Lock*** option using the ▲/▼ button, and press the **OK** (OK) button.

4. Select ***Unlock*** option using the ▲/▼ button, and press the **OK** (OK) button.
5. You will be prompted to enter your password. Enter your password to unlock the channel.
6. Move to the parent menu using the ◀ button to save the changes automatically.

Note: When switching to the locked channel, you must enter the password to watch a programme.

3. Delete a Channel

You can delete the current channel while watching a programme.

1. Press the **OPT+** (OPT+) button.
2. Select ***Delete*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Yes*** in the confirmation message and press the **OK** (OK) button.

4. Enter password using the **NUMERICAL** (0~9) buttons to delete the current channel and move to the next channel.

4. Channel Information

You can display detailed information about the current channel while watching a programme.

1. Press the **OPT+** (OPT+) button.
2. Select Information using the ▲/▼ button to display channel information automatically.

The following information is displayed on the Information.

1st Line : Provider name

2nd Line : Satellite and CAS type

3rd Line : Transponder Information for the channel (Frequency, Polarisation, Symbol rate, FEC)

4th Line : Video PID, Audio PID ,PCR PID (Packet Identification)

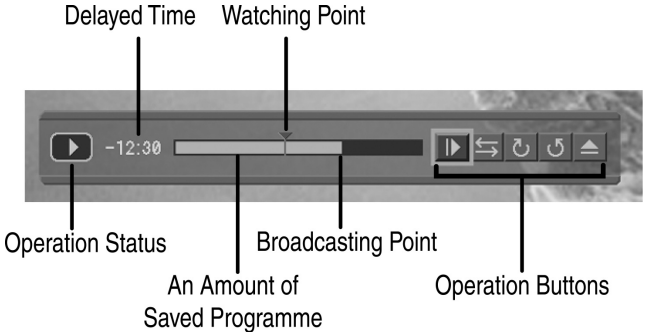
5th Line : Network ID (NID), Service ID (SID)

5. Time Shifted Recording

This unit automatically saves the programme on air so that users can watch programmes as they watch a video tape using functions such as rewind, fast forward, replay and pause.

5.1 Time Bar

If you press playback control buttons while watching TV, the Time bar appears on the bottom of the screen.



Time bar displays the current operation status, the time difference between the broadcasting point and watching point, and an amount of temporarily saved programme. Time bar also provides 5 operation buttons on the right side for additional time shift operations.

5.2 Pause

If you press the **PAUSE** (⏸) button on the remote controller, the current programme is paused. If you press the **PLAY** (▶) or **PAUSE** (⏸) button once again, the programme is resumed from that point.

Note: Pause makes the time difference or delay between the broadcasting point and watching point. The time difference is equal to the paused time period. You can check the time difference in the Time bar. Other operations such as slow motion and rewind also make the time difference.

Press **STOP** (■) button to remove the time difference, and watch the programme on air presently.

5. Time Shifted Recording

5.3 Rewind to Previous Scene

Press the **REWIND** ( ) button on the remote controller to watch the scene passed by. Whenever you press the **REWIND** ( ) button, the rewind speed increases by 3 steps.

If you press the **PLAY** ( ) button, the rewinding operation stops, and the programme is played at normal speed.

Note: You can rewind to the point when you have changed to the current channel. If the watching point reaches the start point during rewinding, the programme is played at normal speed from the point.

5.4 Fast Forward to the Next Scene

Press the **FORWARD** ( ) button on the remote controller to fast forward the programme. Whenever you press the **FORWARD** ( ) button, the speed increases by 3 steps.

If you press the **PLAY** ( ) button, the fast forward operation is stops, and the programme is played at normal speed.

Note: You can use the fast forward operation only when there is a time difference between the current watching and the broadcasting point caused by some previous operations such as pause, slow motion, and rewind. You can fast forward to the current broadcasting point. If the watching point reaches to the broadcasting point, the programme is played at normal speed.

5.5 Recording

Press the **REC** ( ) button on the remote controller to start recording the current programme. While the time shift operation records the programme temporarily, record operation records the programme permanently so you can playback the recorded programme at any time. For more information about recording, refer to **Chapter 6**.

5.6 Additional Time Shift Operations Using Time Bar

You can perform additional time shift operations using the 5 operation buttons on the right side of the time bar.

1. Slow Motion

Select **SLOW MOTION** ( ) and then press the **OK** ( ) button to play the current programme in slow motion. Press the **SLOW MOTION** ( ) once again to play the programme at normal speed.

2. Direct Jump

Select **DIRECT JUMP** ( ) and then press the **OK** ( ) button. A moving arrow appears in progress bar. Move this arrow to a desired time point using the ◀/▶ button, and then press the **OK** ( ) button to play the programme from the specified time point.

3. Skip

Select **SKIP** ( ) and then press the **OK** ( ) button to play the programme from the time point 30 seconds forward from the current watching point.

You can use the skip operation only when there is a time difference between the current watching and the broadcasting point while you use the fast forward operation. If the time difference is less than 30 seconds, the programme is played from the current broadcasting point.

4. Replay

Select **REPLAY** ( ) and press the **OK** ( ) button, to replay the current programme from the 7 seconds before. When the replay has been completed, the programme is normally played from the point.

5. Displaying a Playlist

Select **PLAYLIST** ( ) and press the **OK** ( ) button to display the currently saved programme list.

Select desired programme and then press the **OK** ( ) button to playback the programme.

You can perform the time shift operations like VCR functions using the Playback control buttons while playing a programme.

Press the **STOP** ( ) button to stop playing the current saved programme, and watch the current programme on air.

6. Recording and Playback

You can record a programme without an external media device such as a VCR.

6.1 Instant Recording

Press the **REC** (●) button on the remote controller to record the current programme instantly.

Press the **STOP** (■) button to stop recording.

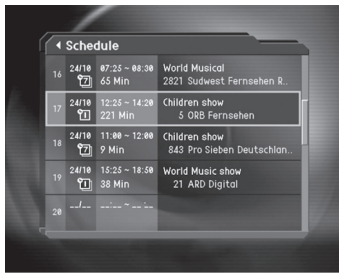
Note:

- You cannot change channels during the recording operation.
- Ensure that there is enough free space before recording, because if the free space on the hard disk drive is insufficient, recording will stop. Recording 1 hour of programme may require up to 3GB of free space of hard disk space. The space for recording 1 hour of programme may be different depending on the programme recorded.
- You can only record TV programmes. You cannot record radio programmes with this product.

6.2 Recording Reservation

You can reserve recording to record your desired programme automatically. You can reserve recording of a programme using ***Menu-Record-Recording Schedule*** and ***Guide.*** For detailed information on recording reservation using Guide, refer to **Chapter 8**.

1. Press the **MENU** (MENU) button.
2. Select ***Record*** using the ▲/▼ button and press the **OK** (OK) or ▶ button.
3. Select ***Recording Schedule*** using the ▲/▼ button and press the **OK** (OK) or ▶ button to display the reserved recording list on the screen.
4. Select a blank list and press the **OK** (OK) button to add a new recording reservation.
5. Select the reserved list and press the **OK** (OK) button to edit the existing reservation information.



1. Adding Recording Reservations

1. Enter the ***Channel Number*** using the **NUMERICAL** (0~9) buttons. The channel name changes automatically according to the input channel number
2. Enter the ***Recording Start Time*** using the ◀/▶ button, and **NUMERICAL** (0~9) buttons.
3. Enter the ***Recording End Time*** using the ◀/▶ button, and **NUMERICAL** (0~9) buttons.
4. Select ***Repeat*** mode from once/Daily/Weekly using the ◀/▶ button.
5. Select ***Programme Lock*** mode using the ◀/▶ button.
6. When you have finished, select ***Save,*** and then press the **OK** (OK) button.
7. Select ***Cancel,*** and then press the **OK** (OK) button to cancel the reservation.

Note:

- You can reserve 20 programmes for recording.
- If the programme to reserve overlaps with the existing one, adjust the reservation so as not to overlap.
- If the target channel is locked, restricted by watching time or parental control, you have to enter a password for reservation.

2. Editing Recording Reservations

Change the ***Programme Title*** using keyboard screen.

1. Change the ***Recording Start Time*** using the ◀/▶ button, and Numerical buttons.
2. Change the ***Recording End Time*** using the ◀/▶ button, and Numerical buttons.
3. Change ***Repeat*** mode using the ◀/▶ button. You can select from Once, Daily, and Weekly.
4. Change ***Programme Lock*** mode using the ◀/▶ button.
5. Press ***Delete,*** and then press the **OK** (OK) button to delete a reservation.
6. Press ***Cancel,*** and then press the **OK** (OK) button to cancel an edit operation.
7. Press ***Save,*** and then press the **OK** (OK) button to finish editing operation.

Note: If you have configured ***Lock*** on a recording reservation, you have to enter a password to playback the recorded programme.

6. Recording and Playback

6.3 Programme Playback

Select your desired programme from the recorded programme list, and then press the **PLAY** (▶) button to playback the recorded programme. button to playback the recorded programme.

You can view the programme list recorded by instant recording or recording reservation by selecting ***Menu - Record - Recorded Programme.*** Otherwise, you can easily view the recorded programme list using **PLAYLIST** (⏏) on the right side of the Time bar while you are watching a programme.

1. Press the **MENU** (MENU) button.
2. Select ***Record*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select a recorded programme using the ▲/▼ button, and press the **OK** (OK) or ▶ button to display the record programme list.
4. Select the desired programme to playback using the ▲/▼ button, and then press the **PLAY** (▶) button to playback the programme.

5. Press the **STOP** (■) button to stop the current programme, and watch the current programme on air.
6. You can perform time shift operations like VCR functions such as rewind, forward, slow motion, pause, skip, and replay using the Playback control buttons on the remote controller or the additional buttons on the right side of the time bar while you are playing back a programme.

Note: For more information on the time shift operations like VCR functions, refer to ***Chapter 5*** .

6.4 Editing Recorded Programmes

Select ***Menu - Record - Recorded Programme,*** and then select the desired recorded programme to edit the information of the programme.

1. Press the **MENU** (MENU) button.
2. Select ***Record*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Recorded Programme*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button. The recorded programme list appears.
4. Select the desired programme, and then press **OK** (OK) to display the edit screen.

Note: If you press the **i** (i) button while playing a programme, a screen appears showing the information on the recorded programme.

1. Deleting a Recorded Programme

Select ***Delete*** in the edit screen, and then press the **OK** (OK) button.

2. Changing The Name of a Recorded Programme

1. Select ***Programme*** in the edit screen, and then press the **OK** (OK) button to display a keyboard on the screen.
2. Enter the desired programme name on the screen keyboard using the ▲/▼/◀/▶ button.
3. Select ***OK,*** and then press the **OK** (OK) button to complete.

3. Protecting Recorded Programmes from Deletion

1. Select ***Protect*** in the edit screen, and then press the **OK** (OK) or ▶ button to change ***Enable*** or ***Disable.***
2. You have to enter a password to change the status from Enable to Disable.

Note: If the protect option of the programme is configured to ***Enable,*** you cannot delete the programme. Therefore, you have to change the protect option to ***Disable*** to delete a protected programme.

4. Locking a Recorded programme

1. Select ***Lock*** in the edit screen, and then press the **OK** (OK) or ▶ button to change ***Enable*** or ***Disable.***
2. You have to enter a password to change the status from Enable to Disable.

Note: If the Lock option of a programme is configured to ***Enable,*** you have to enter a password to playback the programme.

6.5 Checking Hard Disk Drive

You can check the free space of the hard disk drive, and can format the disk drive if necessary.

1. Press the **MENU** (MENU) button.
2. Select ***Record*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***HDD Control*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
4. You can check the used and free space of the HDD.

5. Select ***Format*** and press the **OK** (OK) button to remove all the recorded programmes saved on the HDD, and initialise the HDD.
6. Select ***Yes*** for the format confirm message, and enter a password to start formatting the HDD.

Note:

- You have to be careful because performing format deletes all the recorded programmes saved on the HDD.
- Even if you have removed the HDD because it is out of order, you can still watch programmes.

7. Channel List

5 types of channel lists are provided for easy and quick channel searching.

TV	The list of all TV channels with 2 sub-groups: one is sorted by channel number, the other is sorted by channel name.
Radio	The list of all Radio channels with 2 sub-groups: one is sorted by channel number, the other is sorted by channel name.
Favourite	The list of the favourite channels with 5 sub-groups that you can organise channels by your private taste.
Satellite	The lists of channels classified by satellites.The number of subgroup is decided by the result of channel search.
Scramble	The lists of channels classified by CAS types. The number of subgroup is decided by the result of channel search.

7.1 Displaying and Switching Channel List

You can display channel list using **LIST** (LIST) button and switch into other channel on the channel list.

1. Press the **LIST** (LIST) button while watching a programme to display the selected channel list.
2. Select your desired channel using the ▲/▼ button and press the **OK** (OK) button to change the channel.
3. Enter the channel numeric directly using **NUMERICAL** (0~9) buttons to move cursor into your desired channel. And then press the **OK** (OK) button to change into the selected channel.
4. Select ***On*** by going to ***MENU - Preferences - Miscellaneous - Option in Channel List*** to display scramble icon in the channel list.
   Select ***Off*** by going to ***MENU - Preferences - Miscellaneous - Option in Channel List*** to display only channel list without scramble icon.

Note:

- If there are multiple channels, press the **PAGE-/+** (CH-/CH+) button to move by page.
- Whenever you press the **TV/RADIO** (◯) button while the channel list is displayed, the channel list will be switched between TV and Radio channel list.

7. Channel List

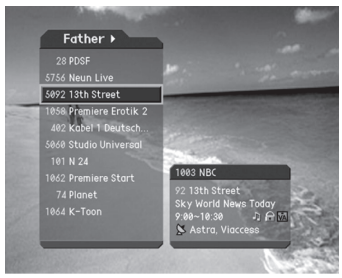
7.2 Changing Channel List Group

You can select channel list by group

1. Press the ▶ button while the channel list is displayed to view the group list.
2. Select your desired channel group using the ▲/▼ button to display its sub-groups.
3. Press the **OK** (OK) or ▶ button, select your desired sub-group using the ▲/▼ button, and then press the **OK** (OK) button.
4. The channel list for the selected sub-group is displayed.

Note:

- The subgroup of Favourite channel list may exist or not depending on your configuration. And the sub-group of Satellite and Scramble channel list may exist or not depending on the result of Channel Search.
- If ***Within the current channel list*** option is selected from ***MENU - Edit channels - Channel Change Mode*** menu, you can only change programme within the selected channel list using the **CH-/CH+** (CH-/CH+) while your watching a programme.



7.3 Edit Channels

You can edit all channels or each channel by channel list group.

1. Press the **MENU** (MENU) button.
2. Select ***Edit Channels*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Edit Channel List*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

4. You will be prompted to enter your password. Enter your password using **NUMERICAL** (0~9) buttons.

Note:

- Press the **BACK** (BACK) or ◀ button to save the changes and return to the previous menu, press the **MENU** (MENU) or **EXIT** (EXIT) button to exit the menu screen.
- You can easily navigate all menus using the assigned numeric for each menu. Press the ***MENU - 2 - 1*** in order at remote controller to select ***Edit Channel List*** menu.

1. Select a Channel Group

You can select the channel list group to edit. TV or Radio, and the sub-groups from the Channel Search for Satellite and scramble channel lists are included as channel list groups.

1. Press the **OK** (OK) or ▶ button in Group to display ***Channel List Group.***
2. Select your desired ***Channel List Group*** using the ▲/▼ button, and press the **OK** (OK) button.

Note:

- Press the **TV/RADIO** (◯) button to ***move to TV or RADIO channel list*** directly.
- For editing ***Favourite channel list,*** move to ***MENU - Edit Channels - Edit Favourite Channels*** menu.

2. Delete Channels

You can delete one or more channels.

1. Move the cursor to the channel list using the ◀/▶ button.
2. Select your desired channel, and then press the **OK** (OK) button to delete the channel(s). You can select multiple channels.
3. Select ***Delete*** in the right using the ▶ button, and press the **OK** (OK) button.

7. Channel List

3. Lock/Unlock Channels

You can lock or unlock one or more channels.

1. Move the cursor to the channel list using the ◀/▶ button.
2. Select your desired channel, and then press the **OK** (OK) button to lock/unlock the channel(s). You can select multiple channels.
3. Select ***Lock*** in the right using the ▶ button, and press the **OK** (OK) button.

Note:

- Only if locked channel(s) is selected or all channels are locked, ***Lock*** is switched into ***Unlock.*** When you press ***Unlock,*** Locked channel is switched into Unlocked channel.
- Enter Password using the **NUMERICAL** (0~9) button to watch Locked channel.

4. Move Channels

You can move one or more channels into your desired location, which changes the channel number accordingly.

1. Move the cursor to the channel list using the ◀/▶ button.
2. Select your desired channel, and then press the **OK** (OK) button. You can select multiple channels.
3. Select ***Move*** in the right using the ▶ button, and press the **OK** (OK) button. Then the selected channel(s) disappears from the channel list for a while.

4. Move the cursor to the desired location in the channel list using the ▲/▼ button, and press the **OK** (OK) button.
5. The selected channel(s) is moved to the selected location in order.

Note: ***Move*** is not available for Satellite or Scramble channel list.

5. Rename a Channel

You can change the channel name as you like.

1. Move the cursor to the channel list using the ◀/▶ button.
2. Select your desired channel, and then press the **OK** (OK) button. You can select only a single channel
3. Select ***Rename*** in the right using the ▶ button, and then press the **OK** (OK) button.

4. Enter a channel name directly using the keyboard displayed on the screen.
5. When finishing entering channel name, select and press the **OK** (OK) button.

6. Select/Unselect All Channels

You can select/unselect all channels at a time.

1. Select ***Select All*** in the right and press the **OK** (OK) button to select all channels.
2. Select ***Unselect All*** in the right and press the **OK** (OK) button to unselect all the selected channels.

7.4 Edit Favourite Channels

You can edit Favourite channel or Favourite channel list.

1. Press the **MENU** (MENU) button.
2. Select ***Edit Channels*** using the ▲/▼ button, and press the **OK** (OK) button.
3. Select ***Edit Favourite Channels*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

7. Channel List

Note:

- Press the **BACK** (BACK) or ◀ button to save the changes and return to the previous menu. Press the **MENU** (MENU) or **EXIT** (EXIT) button to exit the Menu screen.
- You can easily navigate all menu items using the assigned **NUMERICAL** (0~9) buttons for each menu. Press the ***MENU - 2 - 2*** in order on the remote controller to select the ***Edit Favourite Channels*** menu.

The buttons for editing the Favourite channel list are described in the following table.

▶	Add	Adds Favourite channel.
◀	Remove	Removes from the Favourite channel.
♫	TV/Radio	Switches between TV and Radio channel list.
	Fav.Group	Changes Favourite channel list group.
	Move	Moves the order of channel list within the Favourite channel list.
	Rename	Renames the name of Favourite channel list.
abc	Sort	Sorts channels by number or name in all TV/Radio channel list.
	Unselect All	Unselect all the selected channel.

1. Add/Remove favourite channels

You can add favourite channel(s) to a specific Favourite channel list or remove the added favourite channel(s) from the list.

1. Select ***Favourite Group*** using .
2. Select your desired channel(s) in all TV/Radio channel list, and press ▶ to add Favourite channel(s).
3. Select your desired channel(s) in Favourite channel list, and press ◀ to remove Favourite channel(s).

Note: You can switch between TV and Radio channel list using **TV/RADIO** (◯) button at remote controller or ♫ .

2. Move favourite channels

You can move favourite channel(s) to your desired location within the Favourite channel list.

1. Select ***Favourite Group*** using .
2. Select your desired channel to move within the Favourite channel list and press the **OK** (OK) button.
3. Select , and press the **OK** (OK) button.
4. Move the cursor to your desired location using the ▲/▼ button, and press the **OK** (OK) button.
5. The selected channel(s) is moved into your desired location you selected.

3. Rename a favourite channel list

You can rename Favourite channel list.

1. Select Favourite group to rename using .
2. Select , and press the **OK** (OK) button.
3. Enter the ***Favourite channel list*** name using the keyboard displayed on the screen.

4. When finishing entering the Favourite channel list name, select ***OK,*** and press the **OK** (OK) button.

4. Additional Features

Additional Features provides many useful functions which are necessary to add Favourite Channel.

Change between TV and Radio channel list

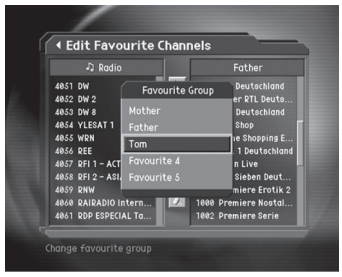
You can add not only TV channel(s) but also Radio channel(s) to Favourite channel list. Press to switch all channel list into TV or Radio channels.

7. Channel List

Note: You can also change into TV or Radio channel by pressing **TV/RADIO** (◯) button at remote controller.

Select a favourite channel list

You can select your desired Favourite channel list to edit. Press to display the Favourite channel list. Then select your desired channel list using the ▲/▼ button, and press the **OK** (OK) button.



Sort a channel list

You can sort all TV or Radio channel lists by channel number or name for easy Favourite channel searching. If channel lists are sorted by channel number, abc is displayed. When you press this button, all the channel lists are sorted by name. Or, if channel lists are sorted by channel name, abc is switched into 123 . Press this button to order channels by number.

Unselect all the selected channels

Press button to unselect all the selected channel.

7.5 Channel Change Mode

You can change the channel either in the group or in the entire groups while watching a programme.

1. Press the **MENU** (MENU) button.
2. Select ***Channel Change Mode*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***All Channels*** or ***Within the Current Channel List*** using the ▲/▼ button, and press the **OK** (OK) button.

Note: When ***Within the current channel list*** is selected, you can only change the channel within the current channel list using the **CH-/CH+** (CH-)/(CH+) buttons. To change the channel in another channel list in which the current channel list is not located, change the channel list group or select ***All channels*** option.

8. Programme Guide

The Programme Guide displays programme information about each channel, based on the date and time.You can also schedule your watching using the information given.

8.1 Viewing Programme Guide Information

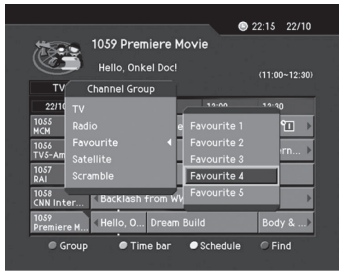
You can view programme information for all channels.

1. Press the **GUIDE** (GUIDE) button.
2. Move to previous or next programme within the same channel using the ◀/▶ button.
3. Move to other desired channel using ▲/▼ button. If there are multiple channels, use **PAGE-/PAGE+** (CH-/CH+) button to move to channels by page. Also, you can enter your desired channel number using the **NUMERICAL** (0~9) buttons at remote controller to move to the channel directly.
4. Select your desired programme, and press the **OK** (OK) button. Then you can watch the programme if it is on air, or you can reserve it if it is the future programme.
5. Press the **i** (i) button in the selected programme to view ***detailed information*** for the selected channel.

1. Viewing Guide Information by Groups

You can view programme information for desired channel list by groups.

1. Press the **GUIDE** (GUIDE) button.
2. Press the **Red** button to display the channel list group.
3. Select your desired channel list group using the ▲/▼ button to display the appropriate sub-group.
4. Move the cursor to the sub-group using the ▶ button, select your desired sub-group using the ▲/▼ button, and then press the **OK** (OK) button.
5. The Programme Guide for selected channel list is displayed.



8. Programme Guide

2. Viewing Programme Information Using Time Bar

You can quickly search for your desired time zone using the Time bar.

1. Press the **GUIDE** (GUIDE) button.
2. Press the **Green** button to display ***Time Bar.***
3. Select the each button using the ◀/▶ button, and press the **OK** (OK) button to move as your desired amount of time. If you press the button repeatedly, the same operation is repeated.

4. Each button functions as follows.

Now	Moves to the current programme where the cursor is located.
◀	Moves to the previous programme or 30 minutes before.
▶	Moves to the next programme or 30 minutes after.
◀◀	Moves to 2 hours before.
▶▶	Moves to 2 hours after.
◀ Day	Moves to one day before.
Day ▶	Moves to one day after.

5. Select and press the **OK** (OK) button to exit the Time Bar.

Note: Guide provides programme information from the previous day to the next 7 days.

3. Reserving a Recording

You can automatically reserve your desired programme by selecting the scheduled programme and pressing the **OK** (OK) button.

1. Select the desired programme and press the **OK** (OK) button. The following message will be displayed.
2. Select ***Yes*** and press the **OK** (OK) button to reserve the programme. When reservation has been completed, the is displayed on the reserved programme.
3. Select ***No*** and press the **OK** (OK) button not to reserve the programme.
4. If the channel is locked, parental controlled or restricted by watching time, you will be prompted to enter your Password. Enter your Password to complete the reservation.

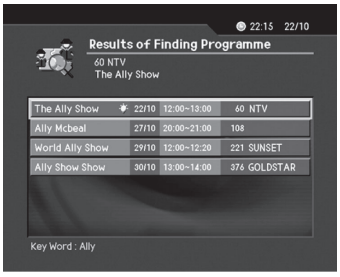
8.2 Finding a Programme

You can find your desired programme by programme name or genre easily.

1. Press the **GUIDE** (GUIDE) button.
2. Press the **Blue** button to display ***Find*** screen.
3. Enter the programme name directly using the keyboard displayed on the screen.

Note: If you select ***Previous*** or ***Next*** on the Keyboard displayed on the screen and press **OK** (OK) button, the keyboard layout is switched.

4. When completing entering programme name, select the ***Find,*** and press the **OK** (OK) button.
5. Select ***By Genre*** and press the **OK** (OK) button to search programme by genre.



6. Select your desired genre and press the **OK** (OK) button.
7. If you select your desired programme from the ***Found Programme List*** screen and press the **OK** (OK) button, you can watch the programme if it is on air, or you can reserve your recording if it is the future programme.

Note: The ***Found Programme List*** may differ depending on the provided programme information.

8. Programme Guide

8.3 Viewing Reserved Programme

You can add or edit watching-reserved programme by schedule screen.

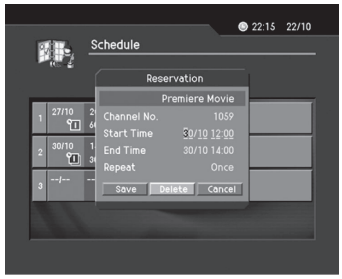
1. Press the **GUIDE** (GUIDE) button.
2. Press the **Yellow** button to display the ***Schedule*** screen.
3. Select the reserved programme and press the **OK** (OK) button to edit the reservation information.

4. Select blank list list and press the **OK** (OK) button to add a new watching schedule.

1. Editing Reserved Programme

1. Change the reserved Start Time using the ◀/▶ button and the **NUMERICAL** (0~9) buttons.
2. Change the reserved End Time using the ◀/▶ button and the **NUMERICAL** (0~9) buttons.
3. Change the Repeat mode using the ◀/▶ button. The options are ***Once, Daily,*** and ***Weekly.***
4. Change the Lock mode using the ◀/▶ button.
5. Select the ***Delete*** and press the **OK** (OK) button to delete the reserved programme.
6. Select the ***Cancel*** and press the **OK** (OK) button to cancel the editing.
7. Select the ***Save*** and press the **OK** (OK) button to complete the editing.

2. Adding Reservation



1. Enter your desired channel number using the **NUMERICAL** (0~9) buttons. The channel name is automatically displayed by channel number.
2. Enter your desired Start Time using the ◀/▶ button and the **NUMERICAL** (0~9) buttons.
3. Enter your desired End Time using the ◀/▶ button and the **NUMERICAL** (0~9) buttons.
4. Select one of **Repeat** mode options among ***Once, Daily,*** and ***Weekly*** using the ◀/▶ button.
5. Select ***Lock*** mode using the ◀/▶ button.
6. Select the ***Save*** and press the **OK** (OK) button to complete entering.
7. Select the ***Cancel*** and press the **OK** (OK) button to cancel the reservation.
8. If the channel is locked, restricted by watching time, you will be prompted to enter your Password to complete the reservation.

Note:

- You can reserve up to 20 programmes.
- If your desired programmed is already reserved programme, adjust the reservation appropriately.

9. Setting Preferences

You can set censorship, watching time, and all other items suitable for your environment.

Note:

- Press the **BACK** (BACK) or ◀ button to save the changes and return to the previous menu. Press the **MENU** (MENU) or **EXIT** (EXIT) button to exit the Menu screen.
- You can easily select all menu items using the assigned **NUMERICAL** (0~9) buttons for each menu.

9.1 Parental Control

You can set parental control for each programme and watching time. You can also change your Password.

1. Press the **MENU** (MENU) button.
2. Select the ***Preferences*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select the ***Parental Control*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

4. When prompting message is displayed to ask Password, enter the Password using the **NUMERICAL** (0~9) buttons.

1. Setting Censorship

Censorship Classification allows you to block programmes according to the age level you have set.

1. Select the ***Censorship Classification*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select your desired ***Age Level*** using the ▲/▼ button, and press the **OK** (OK) button.

View All	All programmes can be watched because there is no age limitation.
7	Programmes are blocked under the age of 7.
12	Programmes are blocked under the age of 12.
15	Programmes are blocked under the age of 15.
18	Programmes are blocked under the age of 18.
Lock All	All Programmes are blocked without considering the age level.

Note: You have to enter Password to watch the programme which is blocked by the age level.

2. Setting Allow Watch Time

You can block programmes according to the watching time for all the channels.

1. Select the ***Allow Time Control*** using the ▲/▼ button.
2. Select Enable or Disable the ***Allow Time Control*** using the ▲/▼ or **OK** (OK) button.

   Disable You can watch whenever you want regardless of Allow Time.

   Enable You can watch only while the time specified by Allow Time.

3. When you have selected ***Enable,*** set the Start and End Time using the **NUMERICAL** (0~9) buttons, and press the **OK** (OK) button.
4. If you wish to cancel the entered time, select the ***Cancel*** button, and press the **OK** (OK) button.

Note: Once the setting has been completed, you can watch programme only while the time specified by Allow Time. Or you should enter the Password to watch any programme during unspecified time.

3. Change Password

You can select whether or not to display the Subtitle automatically if provided.

1. Select ***Change Password*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Enter the ***New Password*** again to confirm the ***Verify Password,*** and press the **OK** (OK) button.
3. Enter the ***New Password*** using the **NUMERICAL** (0-9) button, and select ***OK*** and press the **OK** (OK) button.

Note: The Default Password is **0000** .If you have forgotten your Password, please contact your local product distributor.

9.2 Language Setting

You can set Language for Menu, Audio, and Subtitle.

1. Press the **MENU** (MENU) button.
2. Selec ***Preferences*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Language Setting*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

1. Menu/Audio/Subtitle Language

You can set the language for Menu, Audio and Subtitle. Default language is English.

1. Select ***Menu/Audio/Subtitle Language*** using the ▲/▼ button.
2. Press the **OK** (OK) or ▶ button to display the available ***Language List.***
3. Select your desired language using the ▲/▼ button, and press the **OK** (OK) button.

2. Audio Priority

You can selct the priority of audio.

1. Select Audio Priority using the ▲/▼ button.
2. Presse the **OK** (OK) or ▶ button to display the ***Language*** or ***Dolby Digital*** option.
3. Select your desired option and press the **OK** (OK) button.

Language	You can watch programme in the selected language.
Dolby Digital	You can listen sound in Dolby Digital mode. However, it you select Dolby Digital, you cannot change the language.

3. Subtitle Display

You can select whether or not to display the Subtitle automatically if provided.

1. Select ***Subtitle Display*** using the ▲/▼ button.
2. Select your desired option and press the ▶ or **OK** (OK) button.

Auto	Subtitles are displayed automatically in the predefined subtitle language.
Manual	Subtitles are displayed in the language when you select the subtitle language by pressing the **SUBTITLE** (⊟) button at remote controller.

4. Subtitle Font

You can select the Subtitle font.

1. Select ***Subtitle Font*** using the ▲/▼ button.
2. Select your desired option and press the **OK** (OK) button.

Variable	Uses the horizontally variable Subtitle Font.
Fixed Font	Uses the fixed Subtitle Font.

9.3 Time Setting

You can specify the current time and Power On/Off time.

1. Press the **MENU** (MENU) button.
2. Select ***Preferences*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Time Setting*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

9. Setting Preferences

1. Setting Current Time

You can set the GMT Offset for current time.

1. Select ***GMT Offset*** using the ▲/▼ button.
2. Press the **OK** (OK) or ▶ button to display ***GMT list.*** GMT is changed by from 30 minutes to 1 hour.
3. Select your GMT offset using the ◀/▶ buttons, and press the **OK** (OK) button.

Note: The current time is set automatically whenever GMT Offset changes.

2. Power On Control

You can set the time when the product is automatically powered on.

1. Select ***Power On Control*** using the ▲/▼ button.
2. Select either Enable or Disable the Power On Control using the ▶ or **OK** (OK) button.

   Enable User the Power On Control and sets the Power On time.

   Disable Not uses the Power On Control.

3. When you have seleted ***Enable,*** enter the ***Channel No*** and ***Time*** using the **NUMERICAL** (0~9) buttons, and press the **OK** (OK) button.

3. Power Off Control

You can set the time when the product is automatically powered off.

1. Select ***Power Off Control*** using the ▲/▼ button.
2. Select either Enable or Disable the ***Power Off Control*** using the ▲/▼ or **OK** (OK) button.

   Enable Uses the Power Off Control and sets the Power Off time.

   Disable Not uses the Power Off Control.

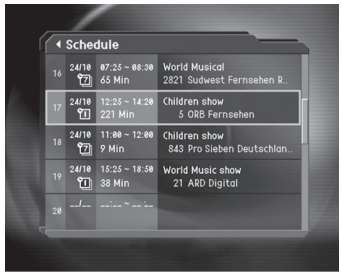
3. When you have selected ***Enable,*** enter the ***Time*** using the **NUMERICAL** (0~9) buttons, and press the **OK** (OK) button.

Note: Once Power On/Off Control is specified, it is repeated everyday.

9.4 Schedule

You can reserve a programme to watch programme at your desired time.

1. Press the **MENU** (MENU) button.
2. Select ***Preferences*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Schedule*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
4. ***Reserved Programme List*** is displayed on the screen. To edit the existing reservation, select your desired reservation, and press the **OK** (OK) button. To add a new reservation, select a blank list and press the **OK** (OK) button.



Note:

- For detailed information about how to edit or add a reservation, refer to ***Ch6 Programme Guide.***
- This menu is enabled only for the product without hard disk drive.

9.5 A/V Control

You can set Audio or Video Output Control.

1. Press the **MENU** (MENU) button.
2. Select ***Preferences*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***AV Control*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button

9. Setting Preferences

1. TV - SCART

You can set TV SCART Output.

1. Select ***TV-SCART*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one option among ***CVBS/RGB/S-Video*** using the ▲/▼ button, and press the **OK** (OK) button.

2. VCR - SCART

You can set VCR-SCART Output.

1. Select ***VCR-SCART*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one option among ***CVBS/S-Video*** using the ▲/▼ or **OK** (OK) button.

3. Screen Ratio

You can set the aspect ratio of your TV.

1. Select ***Screen Ratio*** using the ▲/▼ button.
2. Select one option from ***4:3*** or ***16:9*** using the **OK** (OK) button.

4. Display Format

You can select the Display Format according to TV Screen Ratio.

1. Select ***Display Format*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. If the Screen Ratio is set to '4:3', you can select one from ***Auto/Letter box/Center box*** using the ▲/▼ button, and press the **OK** (OK) button.
3. If the Screen Ratio is set to '16:9', you can select one from ***Auto/Pillar box/Full mode*** using the ▲/▼ button, and press the **OK** (OK) button.

5. TV Standard

You can select the TV Standard: PAL or NTSC.

1. Select ***TV Standard*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button
2. Select one option among ***Auto/PAL/NTSC*** using the ▲/▼ button, and press the **OK** (OK) button.

AUTO	The TV supports both PAL and NTSC.
PAL	The TV supports only PAL.
NTSC	The TV supports only NTSC.

6. NTSC Mode

If TV Standard is set to NTSC, set the following mode.

1. Select ***NTSC Mode*** using the ▲/▼ button.
2. Select one option from ***3.58/4.43*** using the ▲/▼ or **OK** (OK) button.

7. Audio Output

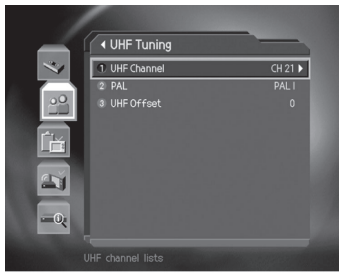
Set the Audio Output.

1. Select ***Audio Output*** using the ▲/▼ button.
2. Select one option form ***Stereo*** or ***Mono*** using the ▲/▼ or **OK** (OK) button.

9.6 UHF

You can set the UHF channel.

1. Press the **MENU** (MENU) button.
2. Select ***Preferences*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***UHF*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.



1. UHF Channel

You can select UHF Channels for the TV. The Channel range and Frequency change according to PAL Standard.

1. Select ***UHF Channel*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select channel range based on the following channel criteria using the ▲/▼ button, and press the **OK** (OK) button.

CH21~CH69	PAL I/G for Europe
CH28~CH69	PAL B for Europe/Australia
CH13~CH62	PAL D for China
CH21~CH69	PAL K for Russia

2. PAL

You can select the PAL standard.

1. Select ***PAL*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one option among ***PAL I/PAL G/PAL B/PAL D/PAL K*** using the ▲/▼ button, and press the **OK** (OK) button.

3. Offset

You can adjust fine tuning setting.

1. Select ***Offset*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select a range between ***-4~+4*** using the ▲/▼ button, and press the **OK** (OK) button.

9.7 Miscellaneous

1. Press the **MENU** (MENU) button.
2. Select ***Preferences*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Miscellaneous*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

1. i-Plate Display Time

You can set the duration during which the Information box is to be displayed when you switch the channel.

1. Select ***i-Plate Display Time*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select a value between 0 ~ 20 seconds using the ▲/▼ button, and press the **OK** (OK) button.

Note: When it is set to '0', the i-Plate will not be displayed when you switch the channel.

2. OSD Transparency

You can set the transparency of On Screen Display.

1. Select ***OSD Transparency*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one option among ***Disable/25/50/75*** using the ▲/▼ button, and press the **OK** (OK) button.

Disable	Fully opaque screen
25, 50, 75	As the number is bigger, the screen is more transparent.

3. Option in Channel List

You can set whether or not to display the scrambled icon in channel list.

1. Select the ***Option in Channel List*** using the ▲/▼ button.
2. Select one option from ***On/Off*** using the ▲/▼ or **OK** (OK) button.

On	Scramble icon display in the channel list.
Off	Scramble icon disappear in the channel list.

10. Installation

This chapter describes how to search for channels and a series of procedures.

10.1 Antenna Setting

You can set Antenna and LNB Information channel search. If antenna is not correctly set, you cannot search channel, therefore, you cannot watch a programme, either.

1. Press the **MENU** (MENU) button.
2. Select ***Installation*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Password is required to use Installation Menu. Enter Password to directly move to Installation Menu.

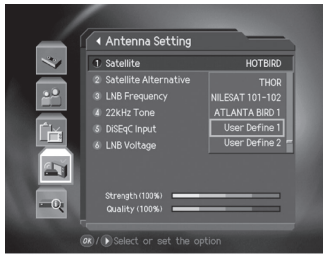
4. Select ***Antenna Setting*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button to enter ***Antenna Setting.***

Note: If no satellite is registered from ***Antenna Setting*** menu, Channel Search such as ***Automatic Search, Manual Search, Multiple Manual Search, Advanced Search*** is not available.

Satellite

You can select satellite for Channel Search.

1. Select ***Satellite*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select the satellite that is the antenna heads for from the alphabetically sorted satellite list using the ▲/▼ button, and press the **OK** (OK) button.



3. If no desired satellite exists in the list, select User Define Satellite item. When you are prompted to select whether or not to edit User Define Satellite, select ***Yes,*** and press the ***OK*** to display keyboard to edit the Name. Enter Satellite Name directly, select ***OK*** and press the **OK** (OK) button.

Satellite Alternative

You can search and watch a programme by using the antenna headed for the selected satellite.

1. Select ***Satellite Alternative*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Then, you can change into one of the following options.

Disable	Does not search the selected satellite.
Enable	Searches the selected satellite.

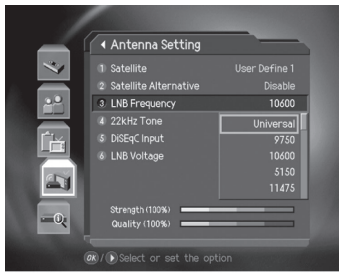
Note: If there is no satellite that Satellite Alternative is set to ***Enable,*** Channel Search is not available.

LNB Frequency (MHz)

You can enter LNB Frequency.

1. Select ***LNB Frequency*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one value from ***Universal,9750,10600, 5150, 11475, User Define*** using the ▲/▼ button. If you have selected ***User Define,*** enter LNB Frequency value directly, and press the **OK** (OK) button

Note: If you have selected ***Universal,*** select ***9750/10600.*** In this case, the ***22KHz tone*** value is ***disabled.***

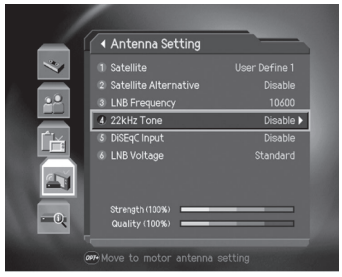


22kHz Tone

You can select whether or not to use 22KHz Tone.

1. Select ***22kHz Tone*** using the ▲/▼ button.
2. Select whether or not to use 22KHz Tone using the ▲/▼ or **OK** (OK) button.

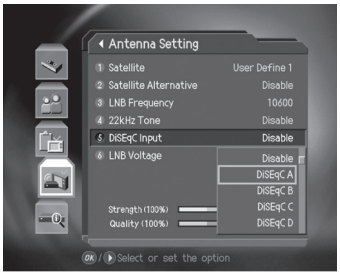
Enable	Selects ***Enable*** if Dual LNB is used or 2 antennas are connected to the 22kHz tone switch box.
Disable	Selects ***Disable*** if 22kHz Tone is not used.



DiSEqC Input

You can select DiSEqC switch.

1. Select ***DiSEqC Input*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
   Select the ***DiSEqC Swtich*** using the ▲/▼ button, and press the **OK** (OK) button.
   You can select one option among ***Tone burst A~B, DiSEqC A~D, DiSEqC A~D for 2.0*** and ***Disable.***



LNB Voltage

You can raise the LNB Voltage value (select ***High***) preparing for the distance between antenna and receiver is further than 60m.

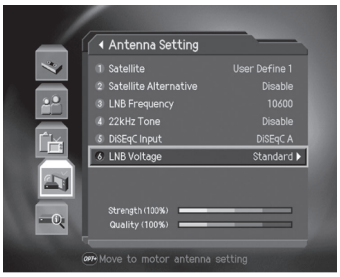
Caution: If your set the LNB Voltage value as ***High*** when the distance between antenna and receiver is close, the LNB may be damaged. Please be careful.

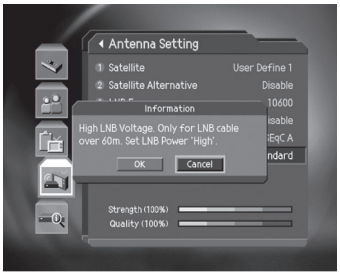
1. Select ***LNB Voltage*** using the ▲/▼ button.
2. Set the ***LNB Voltage value*** using the ▲/▼ or **OK** (OK) button.

   Standard If the distance between antenna and receiver is within 60m

   High If the distance between antenna and receiver is further than 60m

3. If you change the setting value to ***High,*** a message will prompt you to confirm. Select ***Yes*** and press the **OK** (OK) button. When the value is set to ***High*** , 1V higher than LNB voltage is supplied to LNB.





10.2 Automatic Search

If you select the satellite to search channel according to the Antenna Setting, you can automatically search the satellite without entering any other information. And you cannot watch any programme without searching channel.

1. Select **MENU** (MENU) button.
2. Select ***Installation*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Automatic Search*** from Installation menu using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

Satellite

You can select which satellite to search the channel.

1. Select ***Satellite*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one of satellites using the ▲/▼ button, and press the **OK** (OK) button.

Note: Channel Search is performed only for the satellites that have been set to ***Enable*** in Antenna Setting-Satellite Alternative menu. If you wish to search channels for satellites, which is not listed on the Satellite List of Automatic Search, move to ***Antenna Setting*** and set the Satellite Alternative item as ***Enable.***

Search Type

You can set scrambled type to search by free channel or CAS type.

1. Select ***Scrambled Type*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select ***All, FTA*** **and** ***CAS*** using the ▲/▼ button, and press the **OK** (OK) button.

All	Searches all channels.
FTA	Search only free channels.
CAS	Searches channels for selected CAS.

Note: The CAS type is Viaccess, Nagravision, Cryptoworks, and so on.

10. Installation

Channel Type

You can search by TV or Radio channel.

1. Select ***Channel Type*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one option among ***All, TV*** and ***Radio*** using the ▲/▼ button.

All	Searches all channels.
TV	Search only TV channels.
Radio	Searches only Radio Channel.

Search

You can complete the setting and start searching.

1. Select ***Search,*** and press the **OK** (OK) button to start Automatic Search.
2. During operating search, the cursor is located at ***Stop.*** Therefore, if you press the **OK** (OK) button during searching, the operation is stop and the channels found until then will be displayed.
3. If search operation is successfully completed, and the channel does not exist, press the **OK** (OK) button and try to reset the search operation again if necessary.
4. You can delete unnecessary channels from the searched channels. Select your desired channels to delete and press the **OK** (OK) button. Then select ***Delete*** and press the **OK** (OK) button. To delete all channels, select ***Select All*** to select all channels, select ***Delete,*** and press the **OK** (OK) button.
5. When completing Channel Search and deleting unnecessary channels, select ***Save*** to save the changes.

10.3 Manual Search

You can search channels of the selected satellites by transponders if you know the Transponder information.

1. Satellite

Selects a satellite to search from the satellites set in Antenna setting.

1. Select ***Satellite*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one of the Satellite names to search channel using the ▲/▼ button, press the **OK** (OK) button.

Note: If the satellite scheduled to search channel is not exist in the Satellite list, move to ***Antenna Setting*** menu, set Antenna for the Satellite, and then try again.

2. Transponder

Sets transponder value for the satellite

1. Select ***TP*** using the ▲/▼ button and press the **OK** (OK) or ▶ button.
2. Select one value from the TP value using the▲/▼ button, and press the **OK** (OK) button.
3. If you cannot find your desired Transponder information form the Transponder List, select ***User Define,*** and press the **OK** (OK) button to change the Transponder information as follows.
   - Enter Transponder frequency using the **NUMERICAL** (0~9) buttons.
   - Select ***Polarisation*** and press the **OK** (OK) or ▶ button to select one option among ***Auto/Horizontal/Vertical.***

     Note: Horizontal outputs 18V, and Vertical outputs 13V through LNB line.
   - Select ***Symbol Rate (ks/s)*** and press the **OK** (OK) or ▶ button to select one Symbol Rate value from ***27500/26000/22000.*** If your desired value does not exist, select ***User Define*** to enter Symbol Rate value directly using the **NUMERICAL** (0~9) buttons.
   - Select ***FEC (Forward Error Correction)*** option and press the **OK** (OK) or ▶ button to select one option among ***Auto, 1/2, 2/3, 3/4, 5/6, and 7/8.***
   - When completing entering Transponder information, select ***Done*** and press the **OK** (OK) button to finish entering User Define Transponder value.

10. Installation

Note:

- For channel transponder information, you can find your desired information from Satellite channel magazine, Satellite channel related home pages, news release and home page of broadcasting company, etc.
- If you have correctly completed setting the Transponder information, Strength bar and Quality bar should represent as High. If the Level is close to 0, please try to reset.

3. Network Search

If your desired transponder provides the information of other transponder, you can determine whether or not to search the channel for other transponder.

1. Select ***Network Search*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select either ***Enable*** or ***Disable*** and press the **OK** (OK) button. Select ***Enable*** to run Network Search.

4. Search Type

You can determine whether or not to search channel by free.

1. Select ***Search Type*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one option among ***All, FTA*** and ***CAS*** using the ▲/▼ button, and press the **OK** (OK) button.

All	Searches all channels.
FTA	Searches only Free Channel.
CAS	Searches channels for selected CAStype.

5. Channel Type

You can search by TV or Radio Channel.

1. Select ***Channel Type*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one option among ***All, TV*** and ***Radio*** using the ▲/▼ button.

All	Searches all channels.
TV	Searches only TV Channel.
Radio	Searches only Radio Channel.

6. Search

You can complete the setting and start searching.

1. Select ***Search*** and press the **OK** (OK) button to start Manual Search.
2. The next proceodures are the same as those of Automatic Search. Please refer to Automatic Search.

10.4 Other Search

You can directly enter the Packet ID value or find how to search channel using SMATV. And you can search channel for several transponders at one time.

1. Press the **MENU** (MENU) button to run ***Menu.***
2. Select ***Installation*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select Other Search, and press the **OK** (OK) or ▶ button. Press the **BACK** (BACK) or ◀ button to return to the previous menu.

10. Installation

1. Advanced Search

You can find your desired channel by entering Video, Audio and PCR Packet ID directly In Other Search Menu, Select ***Advanced Search*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button to start Advanced Search.

Satellite, Transponder

The setting for satellite and transponder is the same as that of Manual Search. Refer to the satellite and transponder setting for Manual Search.

Video PID, Audio PID, PCR PID

You can enter the PID value for specific channel.

1. Select the ***PID*** to set using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

Video PID	Enter the Video PID value.
Audio PID	Enter the Audio PID value.
PCR PID	Enter the PCR PID value.

2. Set **PID value.**

Auto	Search PID value automatically.
Hexadecimal	Enter PID value in Hexadecimal numeric.
Decimal	Enter PID value in Decimal .

3. When you have select ***Hexadecimal*** or ***Decimal,*** enter PID value directly using Keyboard.
4. When completing entering PID value, select ***OK,*** and press the **OK** (OK) button.

Search

You can complete setting and start searching.

1. Select ***Search*** and press the **OK** (OK) button to start Advanced Search.
2. The next procedures are the same as those of Automatic Search. Please refer to Automatic Search.

2. SMATV Search

If your receiver uses the antenna for common use, operate SMATV Search. For SMATV Search, Channel Search is performed by the antenna for common use regardless of the setting value in Antenna Setting.

Select ***SMATV Search*** in Other Search Menu using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

Frequency

1. Select ***Frequency*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Enter the down converted frequency through common LNB. You can enter the frequency between 950 and 2150 MHz.

Polarisation

1. Select ***Polarisation*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one from ***Disable/Auto/Horizontal/Vertical*** and press the **OK** (OK) button.

Note: Horizontal outputs 18V, and Vertical outputs 13V through LNB line. Select Disable when LNB Power is not necessary.

Symbol Rate

1. Select ***Symbol Rate*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select the symbol rate of the transponder.
   If the rate does not exist in the list, select ***User Define*** and enter the value directly.

FEC

1. Select ***FEC*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select one option among ***Auto, 1/2, 2/3, 3/4, 5/6, 7/8,*** and press the **OK** (OK) button.

Search

You can complete setting and start searching.

1. Select ***Search*** and press the **OK** (OK) button to start SMATV Search.
2. The next procedures are the same as those of Automatic Search. Please refer to Automatic Search.

3. Multiple Manual Search

If you wish to search multiple transponder at the same time, you can run Multiple Manual Search. This function is useful when repeating Manual Search.

1. Select ***Multiple Manual Search*** from Other Search Menu using the ▲/▼ button, press the **OK** (OK) or ▶ button to enable the Multiple Manual Search.
2. Select one option among ***Satellite, Edit TP List, Scrambled Type, Channel Type*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Set the selected item.

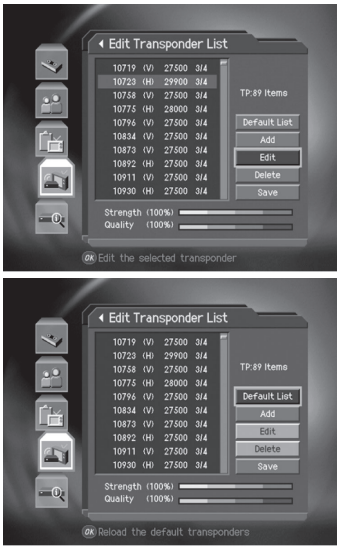
Note: Settings for Satellite, Search Type, and Channel Type are the same as those of Manual Search. Refer to Manual Search.

Edit TP List

You can edit TP list to search at a time and change the setting for Transponder.

1. Select ***Edit TP List*** from ***Multiple Manual Search,*** and press the **OK** (OK) or ▶ button.
2. Select ***Add*** and press the **OK** (OK) button to add a new Transponder data.
3. Select a specific transponder from the ***Transponder List,*** press the **OK** (OK) button, select ***Edit,*** and then press the **OK** (OK) button to edit Transponder data.
4. Select a specific transponder from the ***Transponder List,*** press the **OK** (OK) button, select ***Delete*** , and then press the **OK** (OK) button to delete Transponder data. You can select multiple TPs to delete.
5. When completing configuring ***transponder list,*** select **Save** and press the **OK** (OK) button to save the result and exit.

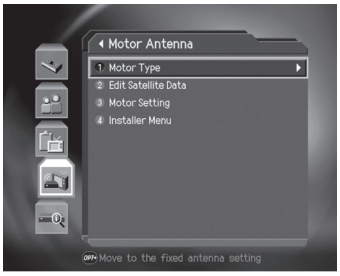
Note: When you select ***Default List*** and press ***OK*** default Transponder List is displayed.



10.5 Motor Antenna

If you use Motor Antenna, which is operated by motor, you should set the antenna as Motor before Channel Search.

1. Press the **MENU** (MENU) button.
2. Select ***Installation*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Select ***Antenna Setting*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
4. Press the **OPT+** (OPT+) button on the ***Antenna Setting*** screen to switch into ***Motor Antenna Menu.***



10. Installation

1. Motor Type

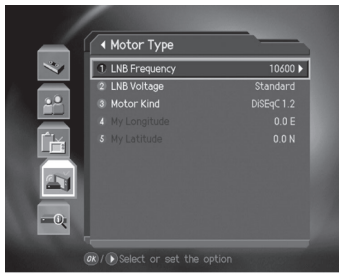
You should set the Motor Type before Motor Antenna Setting.

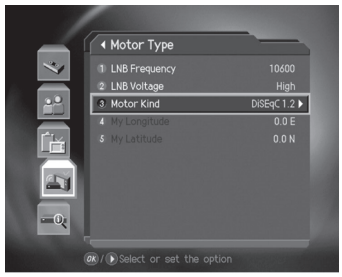
1. Select ***Motor Type*** from Motor Antenna, and press the **OK** (OK) or ▶ button.
2. Set LNB Frequency.
   - Select ***LNB Frequency*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
   - Select one value among LNB frequency list. If desired LNB frequency is not in the list, enter ***LNB Frequency value*** using the **NUMERICAL**(0~9) button after selecting **User Define.**
   - When completing entering LNB Frequency, press the **OK** (OK) button.
3. Set LNB Voltage

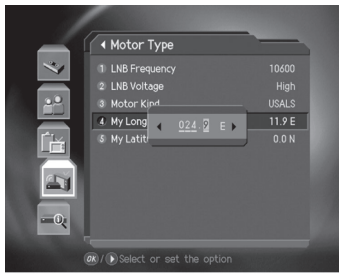
   Refer to ***Installaion - Antenna Setting - LNB Voltage.*** The distance between antenna and receiver is ***30*** m instead of ***60*** m.
4. Select ***Motor Type*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button to select Motor Type.

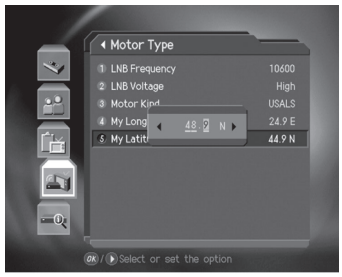
DiSECqC1.2	General Motor Antenna using DiSEqC 1.2
USALS	Motor Antenna using USALS

5. Set My Longitude.
   - Select ***My Longitude*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button to select Motor Type.
   - Enter ***Longitude value*** using the **NUMERICAL** (0~9) buttons.
   - Set ***East/West*** using the ◀/▶ button.
   - When completing setting, press the **OK** (OK) button.
6. Set My Latitude.
   - Select ***My Latitude*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
   - Enter ***Latitude value*** using the **NUMERICAL** (0~9) buttons.
   - Set ***North/South*** using the ◀/▶ button.
   - When completing setting, press the **OK** (OK) button.









2. Edit Satellite Data

You can set the position of the Satellite, which the Motor Antenna heads for, and decide whether or not to use the satellite.

1. Select ***Edit Satellite Data*** from ***Motor Antenna Menu*** using the ▲/▼ button.
2. Move to Edit Satellite Data by pressing the **OK** (OK) button.
3. Select ***Satellite*** using the ▲/▼ button, and press the **OK** (OK) button.
4. Select a satellite to edit, and press the **OK** (OK) button.
5. Select ***Satellite Alternative*** using the ▲/▼ button and press the **OK** (OK) button to decide whether or not to use the selected Satellite.

   Enable Channel Search is available.

   Disable Currently selected Satellite is regarded as out of existence. Channel Search is unavailable.

6. Select ***Satellite Longitude*** using the ▲/▼ button, and press the **OK** (OK) button.
7. Enter the Longitude value for Satellite using the **NUMERICAL** (0-9) button. Change East/West value using the ◀/▶ button.

Note: ***Satellite Longitude*** item is able to edit only for ***User Define Satellite.***

3. Motor Setting

You can set Motor Antenna for Channel Search and watching.

1. Select ***Motor Setting*** from ***Motor Antenna*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Select Satellite.
   - Select ***Satellite*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
   - Select the satellite which the Antenna heads for.
   - Press the **OK** (OK) button.
3. Select ***transponder*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
4. Set Motor Driving.
   - Select ***Motor Driving*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
   - Select ***Motor Driving Type,*** and press the **OK** (OK) button.

     Continuous Motor moves continuously.

     Step Motor moves by specified unit.

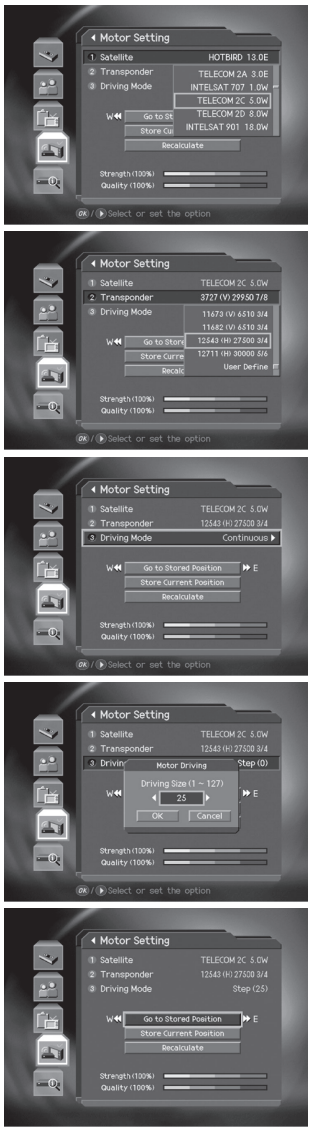
     Time Motor moves during specified time.

   - Adjust ***Driving Size*** using the ◀/▶ button in case of Step or Time.

     Step by Impulse

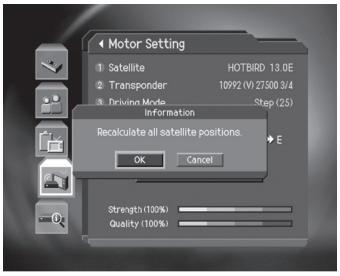
     Time by Second

   - Select ***OK*** , and press the **OK** (OK) button.
5. Move the Antenna to the position of the selected Satellite.
   - Select ***Go to Stored Position*** using the ▲/▼ button.
   - Press the **OK** (OK) button to move Antenna to the position of the Satellite. Please wait during the Antenna is moving.



6. Confirm Signal Strength and Quality Level and fine-tune the Antenna direction.
   - Select ***Go to Stored Position*** using the ▲/▼ button.
   - Move the Antenna to East/West by pressing ◀/▶ button. Adjust ***Signal Level*** to maximum.
7. Save the adjusted position of Satellite.
   - Select ***Store Current Position*** using the ▲/▼ button.
   - Press the **OK** (OK) button to save the Antenna position headed for the selected Satellite.
8. You can set antenna position by satellite by repeating the above procedure.
9. You can recalculate positions for all other satellite based on one satellite. Adjust position of antenna by satellite based on one set position without setting each position of antenna by satellite.
   - Select ***Recalculation*** using the ▲/▼ button.
   - Press the **OK** (OK) button.
   - To adjust all positions again, select ***Yes*** and press the **OK** (OK) button.

Note: You cannot perform 6-9 steps in case of USALS Motor.



10. Installation

4. Installer Menu

You can set default setting and operation limit for Motor Antenna.

1. Select ***Installer Menu*** from ***Motor Antenna Menu*** using the ▲/▼ button.
2. Press the **OK** (OK) button to move to Installer Menu.

Motor Limit Setting

You can set the maximum Motor Limit both East and West to prevent damage to the antenna.

1. Select ***Motor Limit*** using the ▲/▼ button.
2. Set Motor Limit to ***Disable*** by pressing the **OK** (OK) or ▶ button.

   Enable Motor Limit is already set. Motor does not move more than the amount of limit.

   Disable Motor Limit is disabled. Setting is released.

Note: When newly setting Motor Limit, set the value to ***Disable.***

3. Select ***Limit Position*** using the ▲/▼ button.
4. Select the ***Direction of Limit*** by pressing the **OK** (OK) or ▶ button.

   East Motor sets East limit to move.

   West Motor sets West limit to move.

5. Select ***Set Limit*** using the ▲/▼ button.
6. Move antenna to the ***limit position*** to set using ▶ or ◀ button.
7. Press the **OK** (OK) button to set limit.
8. If limit is set, ***Motor Limit*** option is automatically changed into ***Enable.***

Reset Position

You can restore the position saved at Motor Antenna to the default setting.

1. Select ***Reset Positions*** using the ▲/▼ button.
2. Press the **OK** (OK) button.
3. Select ***Yes*** and press the **OK** (OK) button to restore all saved value at Motor Antenna to the default setting.
4. Please wait during the Motor Antenna is restored.

Note: Motor Antenna may not be reset depending on Antenna condition. In this case, please repeat the above procedure again.

10.6 Default Setting

Default Setting restores the receiver to the default settings

Warning: Please note that once you perform Default Setting, all data such as ***Antenna Setting*** information Channel List, and User Configured data are deleted.

To perform Factory Default:

1. Press the **MENU** (MENU) button.
2. Select ***Installation*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Enter ***password*** using the **NUMERICAL** (0~9) buttons.
4. Select ***Default Setting*** using the ▲/▼ button, press the **OK** (OK) or ▶ button.
5. Select ***Yes*** and press the **OK** (OK) button to restore all settings to Factory Default.
   Select ***No*** and press the **OK** (OK) or **BACK** (BACK) button to return to the previous menu.
6. Confirm again to start loading default setting. Enter ***password*** using the **NUMERICAL** (0~9) buttons to perform restoring.
7. When completing the default setting, press the **OK** (OK) button to automatically run the ***Installation Wizard.*** When default setting is completed, Installation Wizard is automatically displayed, which helps Channel Search. For detailed information about Installation Wizard, refer to ***3. Installation Wizard.***

11. Software Upgrade

In order to maintain proper performance of this product, it is essential to have the most up-to-date software. The latest news and release of software versions may be found at the Humax website - http://www.humaxdigital.com.

It is recommended that you periodically check for the availability of software upgrades.

11.1 OTA (Over the Air)

OTA, an abbreviation of ***over-the-air*** , means that downloads the software can be downloaded where the manufacturer reserves the right to decide when and where to release through Antenna system.

Over the Air (OTA) is simply an alternative method for downloading software versions. However, the manufacturer reserves the right to decide when and where this software update can take place by ***beaming*** latest software versions over the air via antenna systems. Note that OTA is only limited to certain geographical regions mainly due to different antennas having different footprints(area where the signal can be received). The software update via satellite system will only occur under the following circumstances.

1. The equipment should have appropriate loader software.
   Caution: Please note that if you don't have normal loader software, the equipment may not be updated or work after software update.
2. The manufacturer decides to release software downloading via a designated antenna system
3. The equipment must be ***tuned*** properly to the same antenna that the manufacturer uses.
4. Upgrade software when the quality of receiving signal strength is high. If the weather is not so good that the quality of receiving signal strength is not recommendable, perform the software upgrade later.

Caution:

- Please be careful to keep the power on and the power cord plugged in during software update. If the power is off during software update, it may cause fatal damage to the product.
- Please be careful not to pull out the signal line (LNB Cable) during software update. Update may be interrupted and the product may not work.

Note:

- The other functions of product cannot work at all during software update.
- It may take 5 ~10 minutes to update software.
- Scheduling operation cannot work during software update.

1. If new software is found when powering on

1. A message will be displayed to notify that new software is found.
2. Select ***Yes*** and press the **OK** (OK) button to update the software.
3. Starts downloading new software. Please wait until the updated is completed.
4. When completing the software update, the equipment is automatically powered off and on again.

2. If updating software from Menu

1. Press the **MENU** (MENU) button.
2. Select ***Installation*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. Enter ***Password*** using the **NUMERICAL** (0~9) buttons.
4. Select ***Software Update*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

5. A message will be displayed to notify that new software is found.
6. Select ***Yes*** and press the **OK** (OK) button to start upgrading.
   Select ***No*** and press the **OK** (OK) button to return to the previous menu.

11. Software Upgrade

If using Automatic Update

You can set the product to find HUMAX software update site and update software automatically.

1. Select ***Automatic Update*** from ***Software Update*** screen using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

2. Automatically search for new software.
3. When detecting update software, the following result is displayed. If new software is not found by Automatic, use Manual Update.
4. Select ***Yes*** and press the **OK** (OK) button to start updating. Select ***No*** and press the **OK** (OK) button to return to the previous menu without updating.
5. When completing the software update, the product is automatically powered off and on again.

Note: Software Update Sites of HUMAX are listed in the following table.

Satellite	Transponder data
Astra1	12669 (V) 22000 5/6
Sirius	12054 (V) 27500 3/4
Hispasat	11811 (H) 27500 3/4
Nilesat	11765 (H) 27500 3/4
Hotbird	11623 (V) 27500 3/4

Among the Software Update Sites of HUMAX, the software search operation is performed only for the satellites that have been set to ***Enable*** in ***Installation -Antenna Setting-Satellite Alternative*** menu and that have all other Antenna Setting correct.

Manual Update

You can perform Manual Update only if you know which satellite has new software and the Transponder information correctly.

1. Select ***Manual*** Update from ***Software Update*** screen using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
   Select the the Satellite which provides update software. Satellite list contains the satellites that have been set to ***Enable*** in ***Installation - Antenna Setting - Satellite Alternative*** menu. For unlisted satellite, start with ***Antenna Setting.***
2. Enter Transponder Frequency in which updated software is provided.
3. Enter ***Polarisation value.***
4. Select ***Symbol Rate value.*** If it is not found in the List, select User Define and enter manually.
5. Select ***FEC value.***

Note: How to setting Satellite and Transponder for Manual Update Sites is the same as how to edit User Define Transponder data in Manual Search. Refer to Manual Search.

6. Select ***Search*** and Press the **OK** (OK) button to search software.
7. It is displayed whether or not New Software exist.
   If new software does not exist, press the **OK** (OK) button to return to the Manual Update Menu.
8. Select ***Yes*** and press the **OK** (OK) button to start updating. Select ***NO*** and press the **OK** (OK) button to return to the previous menu.
9. Performs Software Update. Please wait until it is completed.
10. When completing the software update, the product is automatically powered off and on again.

11. Software Upgrade

11.2 Software Update from PC

You can connect your receiver to the PC directly and upgrade your software by transferring the new software from the PC. Follow these steps to download new software from PC to this product.

1. Download new software file (HDF files) equivalent for this product model from our website into your computer (http://www.humaxdigital.com).
2. Download and install download tool file from our website into your computer.
3. Connect your PC to this product with RS-232C serial cable.
4. Execute installed download tool, and then follow the instructions contained the download tool.
5. Press the **STANDBY** ( ) button to make this product operating.

12. System Information

You can view all system information, signal strength, and Common Interface information.

1. Press the **MENU** (MENU) button.
2. Select ***System*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.

12.1 Status

You can view System information

1. Select ***Status*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Confirm the information about ***Hardware version, Software version, Loader version, System ID, Slot1, 2.***

12.2 Signal Detection

You can view the signal strength and signal quality receiving from satellite via your satellite dish.

1. Select ***Signal Detection*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
2. Display information about the satellite and transponder, which current channel belongs to and the graphs and percentage of Signal Strength and Quality of the channel.

12.3 Common Interface

You can view the current status of CI module.

1. Select ***Common Interface*** using the ▲/▼ button, and press the **OK** (OK) or ▶ .
2. Select ***each Slot*** using the ▲/▼ button, and press the **OK** (OK) or ▶ button.
3. If Common Interface is available, you can view information about each Slot.

Note: The displayed information about each Common Interface may differ depending on Common Interface type.

13. Games

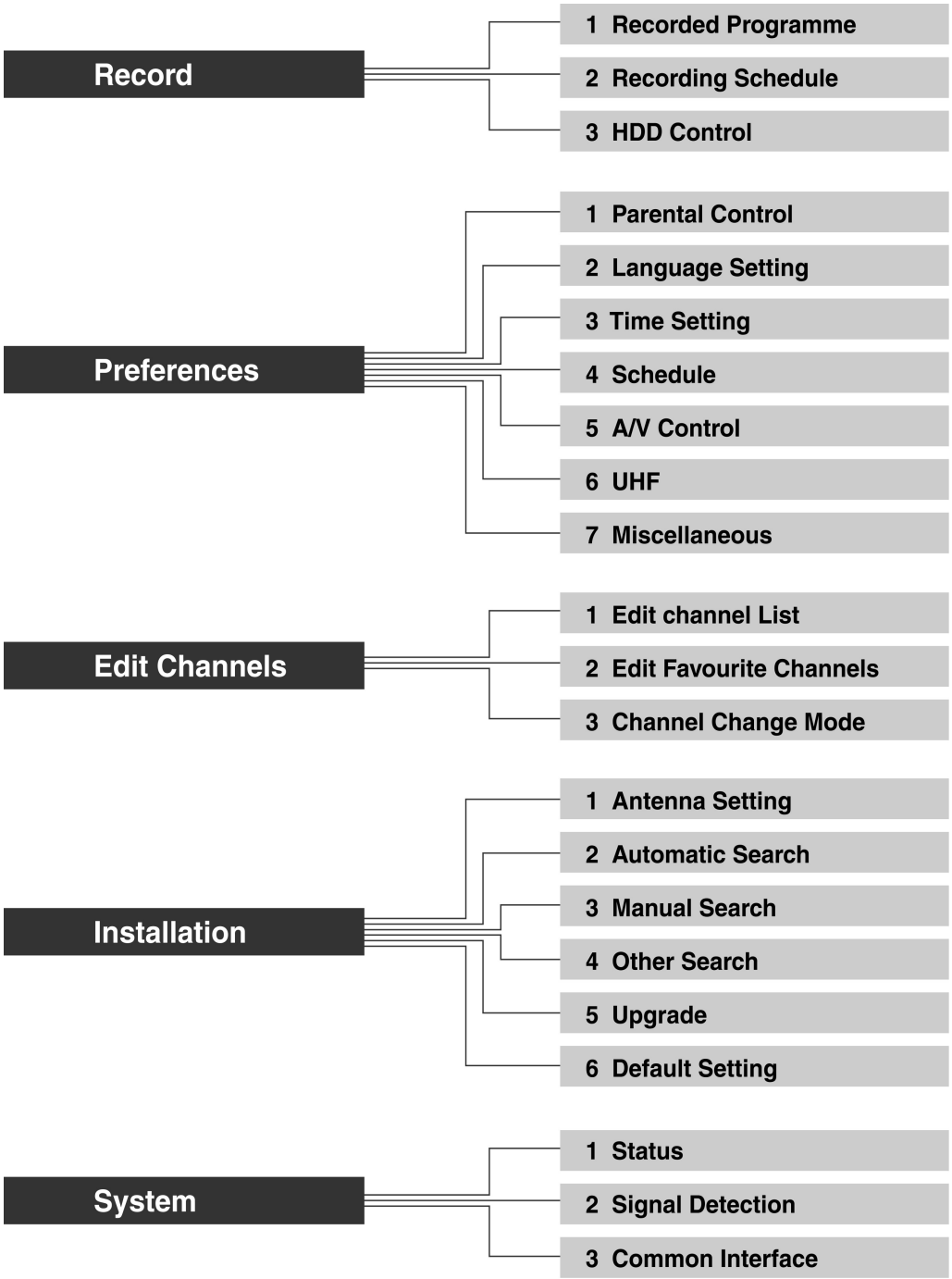
This product provides various games for user's entertainment.

1. Press the **GAME** (G) button.
2. According to the instruction displayed on screen, you can enjoy the game using ▲/▼/◀/▶ and **OK** (OK) button.

Note:

- Press the **EXIT** (EXIT) or **BACK** (BACK) button to exit the game.

14. Menu Map


Record
1 Recorded Programme
2 Recording Schedule
3 HDD Control
Preferences
1 Parental Control
2 Language Setting
3 Time Setting
4 Schedule
5 A/V Control
6 UHF
7 Miscellaneous
Edit Channels
1 Edit channel List
2 Edit Favourite Channels
3 Channel Change Mode
Installation
1 Antenna Setting
2 Automatic Search
3 Manual Search
4 Other Search
5 Upgrade
6 Default Setting
System
1 Status
2 Signal Detection
3 Common Interface

15. Trouble Shooting

15.1 Trouble Shooting

Before contacting your local service, please make sure following instructions. If the product does not work normally after completing the following trouble shooting, please contact your local product distributor or service centre.

1. No message is displayed on the front panel or product has no power.
   - Check the main power cable and check that it is plugged into a suitable power outlet.
   - Check whether the Power Switch is On.
2. No picture
   - Make sure that the product is in Operation Mode.
   - Make sure that the AV Cable is firmly connected to the TV.
   - Make sure that Antenna line is correctly connected to the equipment.
   - Make sure that ***Antenna Setting*** is correct.
   - Check the brightness level of TV.
   - Check the channel is on air.
3. Poor picture and sound quality
   - Install the antenna in a place where there is no obstacle.
   - Make sure there is no mobile phone or microwave oven near the equipment.
   - Use 75 Ω coaxial cable to connecting TV and antenna.
   - Keep the product and the antenna cable for satellite far away from each other.
   - Make sure the receiving level, and adjust antenna if the level is low. The receiving level can be influenced by weather.

     Note: If the CS Antenna is covered with snow or the RF is weaken by heavy rain, sound and picture may temporarily be poor. However, these poor sound and picture quality because of weather conditions cannot be not accepted as a malfunction of equipment.

   - Change satellite dish into bigger one if satellite dish is small.
   - Replace LNB with the one with low noise factor if the noise factor is high.
   - Replace LNB with new one if it is damaged or out of order.
4. No or poor sound
   - Check the volume level of the TV and Receiver.
   - Check the Mute status of the TV and product.
   - Press the Audio button to change the Sound Track type.
5. Remote controller does not operate
   - To control the equipment with the remote controller, the remote controller's top end should directly point towards the receiving part of receiver's remote controller.
   - Check the battery of Remote controller.
6. Reservation is unavailable
   - Check whether it it not overlapped with other reservation.
   - Check whether the power switch is off.
7. Watching scrambled channel is not available
   -Check the correct Smart Card is plugged in.
   - Check the correct smart card is plugged in, and correctly plug the smart card again.
   - Check whether the Smart Card is damaged.

15. Trouble Shooting

15.2 Error Message

Error message	Possible causes	What to do
No or bad signal	The satellite dish is not pointing at the satellite.	Adjust dish.
	Signal too weak.	Increase the LNB voltage or connect a signal amplifier.
	Satellite dish is too small.	Change to a large dish.
	LNB is faulty.	Change the LNB.
	Wrong antenna setting.	Set the antenna correctly
The channel is scrambled or not available.	The channel has signal, but no audio or video.	Confirm if the channel is currently on air
	The channel is not deleted by broadcasting company.	
	The channel is for data broadcasting.	Cannot watch the channel in usual way.
	Smart Card is not plugged in.	Plug in Smart Card.
	The Smart Card is not correct.	Plug in suitable Smart Card.
	Smart Card is not correctly plugged in.	Pull out the Smart Card, and plug it in again.
	Smart Card is broken.	Replace the Smart Card.
The audio is not available.	The channel has signal, but no Audio.	Press the Audio button to confirm if the channel has Audio.
CI module is not installed.	CI module is not installed.	Install CI module.
	CI module is not correctly inserted.	Reinstall CI module.
	CI module is not recognized.	Install other CI module to check if the exiting CI module has problem. If the existing CI has no problem, contact local distributor of the equipment.
Invalid CI module	CI model is not correct.	Install correct CI module.
	CI module is not correctly inserted.	Pull out the CI module and plug it in again.
	CI module is broken.	Replace CI module.
LNB short	LNB cable is shorten.	Replace LNB Cable.
	LNB is internally shorten.	Replace LNB.
	LNB In Port is inserted by alien substance or damaged.	Remove the alien substance and contact local service center if it is damaged.

16. Specification

Tuner & Channel	
Input Connector	F-type, IEC-169-24, Female
Frequency Range	950MHz to 2150MHz
Signal Level	-25 to -75dBm
LNB Power & Polarisation	Vertical: +13.5V (+14V at high voltage) Horizontal: +18.5V (+19V at high voltage) Current: 500mA Max. Overload Protection
22kHz Tone	Frequency: 22±4kHz Amplitude: 0.6±0.2V
DiSEqC Control	Version 1.0/1.2/2.0 Compatible, USALS
Demodulation	QPSK
Input Symbol Rate	1~45 Ms/s
FEC mode	Convolutional Code Rate 1/2, 2/3, 3/4, 5/6 and 7/8 with Constraint Length K=7
MPEG Transport Stream A/V Decoding	
Transport Stream	MPEG-2 ISO/IEC 13818 Transport Stream Specification
Profile Level	MPEG2 MP@ML
Video Input Rate	15 Mbit/s Max
Aspect Ratio	4:3, 16:9 , Letter box
Video Resolution	720x576, 720x480
Audio Decoding	MPEG/MusiCam Layer I & II
Audio Mode	Single channel/Dual channel/Joint Stereo/Stereo
Memory	
Flash Memory	2M byte
Graphic (MPEG) and System DRAM	16M byte
EEPROM	8K byte

16. Specification

RF Modulator	
RF Input/Loopthrough output	75 Ω , IEC169-2
Frequency	470~862 MHz
Output Channel	CH 21~69
TV Standard	PAL B/G/I/D/K
A/V and Data In/Out	
Video	RCA/SCART Video Output (CVBS, S-Video)
Audio R/L	RCA/SCART Volume and Mute Control (Resolution: 20 bits DAC, MAX, 2Vrms)
S/PDIF	Digital Audio Output, Fiber-Optic (Resolution: 20 bits)
RS-232C	Transfer Rate : 115,200bps, 3 pin Socket type
Power Supply	
Input Voltage	90~250V AC, 50/60Hz
Type	SMPS
Power Consumption	Max. 40W
Standby Power	≤ 8.5W
Protection	Separate Internal Fuse. The input should be protected against lighting
Physical Specifications	
Size	370 * 60 * 262 mm
Weight (Net)	Around 3.8Kg
Operating Temp	0 ℃ to + 45 ℃
Storage Humidity	5% ~ 95% RH (Non-Condensing)

17. Glossary

DiSEqC (Digital Satellite Equipment Control)

A standard through which it is possible to let a DiSEqC compatible receiver send a signal over the RF cable to a switching device to switch between different LNBs or dishes. The DiSEqC uses the 22KHz signal to control the switching device.

Programme Guide (Electronic Programme Guide, EPG)

A electronic program guide (EPG) that comes with the broadcast to a particular satellite, note that every station fills the EPG differently or not, so differences in the EPG are not necessarily receiver errors.

Frequency

The number of cycles or events per one second, which is expressed in the unit of hertz

FTA (Free-To-Air)

An unscrambled broadcast, which you can view without additional payments to a service provider.

Hi-Fi (High Fidelity)

The characteristics of audio devices that can play back all the audio frequencies of the human, which is the range of 16Hz~20KHz, uniformly from the low frequency to high frequency. Sometimes it is used to indicate good quality of an audio device such as stereo tape recorder.

LNB (Low Noise Block)

An electronic unit mounted on the satellite dish. It receives the signals reflected by the dish and converts them to signals that can be used by this product.

OSD (On Screen Display)

The function that displays the information about the monitor that the user needs or has to know on the screen directly. OSD information includes brightness, contrast, tuning, RGB adjustment, and screen size and positions (top, left, width, and height), and so on.

OTA (Over The Air)

Means that software downloads where the manufacturer reserves the right to decide when and where to release them through satellite system.

RF (Radio Frequency)

Frequencies occupied by radio waves of the total frequency range of electromagnetic waves.

SCART

A 21-pin connector used for connection of this product, VCR and TV. Also called Euroconnector or Peritel connector.

S/PDIF (Sony/Philips Digital Interface format)

Standard format for digital audio output. It outputs audio signals directly as digital audio signals without changing into analog signals because conversion into analog signals can degrade signal quality.

Transponder

An automatic device that receives amplifies and retransmits a signal on a different frequency.

18. Service and Support

You can get information such as a troubleshooting guide, software upgrades and product support guide from the following web sites and call center (Hotline).

Please try to contact to your local dealers first when you have any problem.

Web site and e-mail

Homepage

http://www.humaxdigital.com	English
http://www.humaxdigital.com/Deutsch/	Deutsch
http://www.humaxarabia.com	Arabic

HCSA (Humax Customer Service Area)

Software Download, Information and Technical Q&A

http://www.humaxdigital.com/hcsa/	English
http://www.humaxdigital.com/Deutsch/hcsa/	Deutsch

E-mail (Technical Q&A)

tech-info@humax-digital.co.uk	Europe & North Africa
techinfo@humax-digital.de	Germany
callcenterME@humaxdigital.com	Middle East
Webmaster@humaxdigital.com	Asia & Other area

Call Center

Humax Middle East Call Center (Dubai, UAE)

Tel:	+971 (0)4 359 2323 (Open: 9:00 - 20:00 / close on Friday)
E-mail:	callcenterME@humaxdigital.com
Open:	Local Time in Dubai (GMT+4) 9:00 - 20:00 (Saturday - Thursday, close on Friday)
Support Language:	English/Arabic

Humax Hotline (Germany)

Germany:	01805 778 870 (€ 0,12/Min)
Other Countries:	+ 49 1805 778 870 (€ 0,12/Min+ International Call Charge)
Open:	Local Time in Germany (GMT+1) 8:00 - 20:00 (Monday - Friday) 8:00 - 18:00 (Saturday)
Support Language:	Deutsch/English

Humax BTCI Hotline (Premiere Model)

Germany:	01805-778900 (€ 0,12/Min)
Austria:	0900-900633 (€ 0,33/Min)

For hardware repair, please refer to support website. (Homepage or HCSA)